#15133131
8809540
TD
195
.E49
M73
1986

REFERENCE GUIDE TO SOCIOECONOMIC MITIGATION

Natural Resource Development and Community Impact Mitigation

PREPARED BY:

PAUL MYERS, Sociologist
Division of Resource Systems
Denver Service Center

STEPHEN M. BROWN Staff Attorney
Division of Energy and Minerals
Office of the Solicitor

Bureau of Land Management

Office of Planning & Environmental Coordination, Washington Office

April 1986

BLM Library
D-553A, Building 50
Denver Federal Center
P. O. Box 25047
Denver, CO 80225-0047

IN REPLY REFER TO:
9580 (760)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

August 8, 1986

Information Bulletin No. 86-318

To: All Field Officials

From: Director

Subject: Reference Guide to Socioeconomic Mitigation

Attached is a copy of the Reference Guide to Socioeconomic Mitigation prepared by Paul Myers, Sociologist in the Denver Service Center, and Stephen M. Brown, Staff Attorney in the Office of the Solicitor.

The Guide is intended to provide BLM field managers and resource specialists with an overview of socioeconomic mitigation issues occasionally faced by public land managers. Though the document does not prescribe policy, it recognizes that the primary responsibility for mitigating community social and economic impacts rests with State and local governments. This background information should serve a a valuable reference tool for managers and resource specialists.

Comments or questions regarding the Reference Guide should be directed to Molly Brady in the Division of Planning and Environmental Coordination (FTS 653-8824). We would appreciate any feedback on the content and organization of the material. Recommendations for additions are also welcomed inasmuch as we intend to update the Reference Guide on an as-needed basis.

James M. Parker
Assistant Director
Support Services

1 Attachment (sent under separate cover to addressees only):
1 - Reference Guide to Socioeconomic Mitigation, dated 4/26 (314 pp)

TABLE OF CONTENTS

Chapter — Page

I. Introduction

The Issue I-1
Purpose of the document I-2
Contents I-3

II. Social and Economic Mitigation of Natural Resource Development Proposals

Introduction II-1
Proposal modification and enhancement of community capacity . . II-2
Mitigation of different types of resource developments II-4
Adequacy of information and certainty of project proposals . . . II-5
Types of mitigation measures II-7
Mitigation objectives II-9
Suggested and required measures II-10
Enforcement of measures II-11
Assumptions in environmental assessments II-14

III. Roles and Responsibilities of Various Government Levels in Off-Site Social and Economic Mitigation

Introduction III-1
Exhibit 1: Gilmore, John S., "Observations and Comments on the Roles of Federal, State, and Local Governments in Socioeconomic Impact Mitigation" III-5

IV. Community Mitigation and the Bureau of Land Management

Overview of chapter IV-1
General principles and practices IV-2
1. Primary responsibility for community mitigation IV-2
2. Identification and assessment of local effects IV-2
3. Consideration of local perspectives IV-3
4. Provisions for community expansion and for revenue distribution IV-3
5. Memoranda of understanding IV-4
6. Social and economic carrying capacities and thresholds . . IV-6
7. Special stipulations IV-7
Relevant federal legislation and regulations IV-11
1. National Environmental Policy Act IV-11
2. Council on Environmental Quality Regulations for Implementing NEPA IV-12
3. Federal Land Policy and Management Act of 1976 . . . . . IV-14
4. Mineral Lands Leasing Act IV-18
5. Federal Coal Leasing Amendments Act of 1975 . . . . . IV-21

Mitigation Activities in the Bureau of Land Management IV-23
1. Memorandum of Understanding IV-24
Exhibit 2: MOU, Rio Blanco County, Colorado and SD, BLM . . IV-25
2. Stipulations IV-33
Exhibit 3: Stipulations, Prototype Oil Shale Program . . . IV-35
3. Social and economic mitigation, Piceance Basin RMP IV-37
Exhibit 4: Director's response to Piceance Basin RMP protest on mitigation stipulation IV-41

V. Mitigation Activities of Other Federal Agencies

Overview of chapter V-1
Forest Service V-3
Bureau of Reclamation V-9
Exhibit 5: Brown, Curtis A., "The Central Arizona Water Control Study: A Case for Multiobjective Planning and Public Involvement" V-11
Office of Surface Mining V-19
Federal Energy Regulatory Commission V-21
Exhibit 6: Virginia Electric Power Company, license conditions and administrative law judge's discussion . . . V-23

VI. American Indians

Background VI-1
Secretarial trust responsibility VI-1
Mineral Leasing Act and Indian tribes VI-3

VII. State Government Programs

Introduction VII-1
Colorado VII-5
Montana VII-7
New Mexico VII-11
North Dakota VII-13
Utah VII-15
Wyoming VII-19

VIII. Local Government Approaches

Introduction VIII-1
Exhibit 7: Garfield County, Colorado: Fiscal Impact Mitigation Program VIII-3

IX. The Private Sector and Community Mitigation

Introduction IX-1
Exhibit 8: Metz, William C., "Industry Initiatives in Impact Mitigation" IX-3

X. Case Law and Legal Opinion

Introduction X-1
Discussion of Ventura County v. Gulf Oil Corporation X-5
Exhibit 9: Ventura County v. Gulf Oil Corporation X-11
Exhibit 10: Associate Solicitor memorandum on "Ventura County and the 'applicable local laws' stipulations" . . . X-15
Exhibit 11: Regional Solicitor, Rocky Mountain Region, memorandum on "Protest of Piceance Basin RMP" X-19
Discussion of Blackhawk Coal Company X-23
Exhibit 12: Blackhawk Coal Company (IBLA) X-27
Broad Interpretation of the Secretary's Section 30 Authority . . X-51
Exhibit 13: Pring, George W., "Power to Spare: Conditioning Federal Resource Leases to Protect Social, Economic, and Environmental Values" X-53
Narrow Interpretation of the Secretary's Section 30 . . . . . X-87
Exhibit 14: Little, John R. Jr., "Stipulations in Mineral Leasing Act Leases: Power to Spare or Spare Power?" . . . X-89
Shell Oil Company Comments on Secretary's Responsibility for Off-Lease Impacts under Section 30 and Indian Trust X-93
Exhibit 15: Comments of Shell Mining Company on Draft Powder River EIS X-95
The Relationship Between Sections 30 and 35 of the MLA X-99

XI. Bibliographical Material

Introduction XI-1
Exhibit 16: Halstead, John M.; Chase, Robert A.; Murdock, Steve H.; and Leistritz, F. Larry; Socioeconomic Impact Management: Design and Implementation; contents and references XI-3

BLM Library
D-553A, Building 50
Denver Federal Center
P. O. Box 25047
Denver, CO 80225-0047

Chapter I

Introduction

The Issue

Mitigation is the practice of reducing adverse effects and further enhancing beneficial effects on areas affected by natural resource uses or developments. Community socioeconomic mitigation questions have been persistent issues within the Bureau of Land Management (BLM) and the Department of the Interior during the past decade, particularly since Federal coal and oil shale leasing activities resumed in the 1970s. The questions emerged as the agency projected very significant local population and associated public service demand changes in its mineral leasing documents and associated environmental assessment documents. This has resulted in an ongoing dialogue between BLM and other participants in processes dealing with energy mineral development and community change.

Among the uncertainties have been the range of BLM mitigation authorities, its appropriate position relative to State and local authorities and requirements, variations in its position in planning, leasing, and permitting activities, and the handling of mitigation measures in environmental assessments. Many of these considerations have remained unsettled.

Socioeconomic mitigation questions have been widespread, as well as durable. Authority and operational issues affect the entire array of participants involved in Federal mineral leasing and other resource programs. Included are:

1. State, county, tribal, and municipal officials
2. Advocacy and voluntary organizations
3. Project proponents and other private sector firms
4. BLM managers and staff at all organizational levels

It has been and remains commonly agreed upon that eventually State and local authorities must respond to changes in community conditions caused by nearby resource developments. However, the manner in which BLM exercises its responsibilities and carries out its roles in facilitating this response has been variable. BLM has responded on a case-by-case basis, depending on State and community policies and practices. The use of this approach is likely to continue in the future.

Purpose of the document

This Reference Guide is intended to provide an overview of socioeconomic mitigation issues occasionally faced by public land managers. Though it does not prescribe policy, it recognizes that the primary responsibility for mitigating community socioeconomic impacts rests with State and local governments. The document includes a description of the legal, legislative, regulatory, and practical administrative environments in which BLM, relative to community impact mitigation, has roles.

BLM managers, social science and resource specialists, and non-Bureau participants in mitigation processes should find this document useful for achieving a better understanding of and more effectively responding to situations requiring socioeconomic mitigation.

Contents

The Guide is organized to provide the reader with thorough jurisdictional coverage of community impact mitigation. First, some basic mitigation concepts are discussed in Chapter II. Federal, State, and local jurisdictional issues are addressed in Chapter III. Both of these sections are essentially background components of the Reference Guide. They are included for readers who may lack familiarity with some basic socioeconomic mitigation concepts.

BLM's situation relative to community mitigation is described in Chapter IV. Key legislative materials are identified and discussed. Examples of BLM mitigation activities are also incorporated into this chapter.

Mitigation approaches of other Federal agencies (Chapter V), Indian tribal mitigation issues (Chapter VI), several State government mechanisms (Chapter VII), and local government strategy discussions (Chapter VIII) are in turn furnished to users of the Reference Guide. The intent is to provide a well-rounded understanding of the multiple jurisdictions affecting and affected by resource development socioeconomic mitigation programs in the West. No single agency or jurisdiction operates independently of others in

these processes. Also, since private sector project proponents are central actors in these processes, Chapter IX is devoted to a report on corporate activities in community growth management.

The Reference Guide's Chapter X was prepared by the Solicitor's Office of the Department of the Interior. It provides an overview of relevant case law and legal opinion on social and economic mitigation. Materials in this section are somewhat inconclusive with regard to legal interpretation. This reflects a lack of definitive legislation and focused case law on the subjects covered. Nevertheless, this chapter should be particularly useful to Bureau employees involved in mitigation processes.

The final section, Chapter XI, is composed of references on socio-economic mitigation for readers interested in additional source materials.

Chapter II

Social and Economic Mitigation of Resource Development Proposals

Introduction

Mitigation of socioeconomic impacts of resource developments is a topic that is not subject to complete capture using a fixed hierarchy or sequence of principles and findings. This document is mainly organized on the basis of institutions and the activities of these institutions relative to mitigation. Given the array of jurisdictions and authorities, this is the most natural and straightforward way to present the needed material.

However, the exclusive use of such an approach discourages coverage of several realities that intervene and thus modify the actions of the several involved institutions in mitigation situations. These factors slice across and through the institutional settings. They are not particularly unique to BLM. Rather, they apply regardless of the particulars of any given mitigation case.

Users of this document should be aware of these basic factors, covered in this chapter, as they use or proceed through the institutional coverages that follow in later chapters.

Proposal modification and enhancement of community capacity

Once a socioeconomic effect of a proposal has been identified and judged to be adverse, there are only two basic ways to relieve the effect. The first method available is the alteration of the proposal or aspects of the proposal's implementation. This can be done by changing the design, the location, the implementation schedule, or scale of the project. These measures may be planned to reduce the intensity of the effects by, for example, timing the construction period or periods so that fewer workers are imported into the affected area. This serves to reduce through time the population effects of the operation.

In the BLM, the best example of using a schedule adjustment to mitigate socioeconomic impacts is found in the proposed Resource Management Plan (RMP) for the Piceance Basin in Colorado where the potential for rapid growth accompanying oil shale development was a major concern. In that plan, a population growth threshold or carrying capacity was established. The implementation schedule for oil shale development may be adjusted if population growth exceeds the threshold. The intent is to avoid unnecessarily burdensome growth impacts on affected communities. See Chapter IV for a more detailed discussion of the use of thresholds to mitigate adverse socioeconomic impacts.

A case study report in Chapter V on a Bureau of Reclamation project in Arizona serves as an example of proposed design changes that resulted in preconstruction mitigation of adverse local socioeconomic effects that would have otherwise occurred.

Enhancement of community capacity in responding to changes is the second general set of mitigation strategies. If shortfalls, deficits, or other difficulties are expected, it is possible to design programs that are based on the anticipation or occurrence of these problems. The collection of such programs is very diverse, ranging from the direct provision of housing for employees to prepayment of taxes to bolster community revenues to coincide with service and facility demands.

Most mitigation approaches tied to natural resource development proposals are in the community enhancement category. Host communities are generally viewed as more adaptable than proposals. There are many reasons for this situation. The fixed and often extremely limited location of some resources is a primary factor. Transportation costs and systems, along with processing and market locations, are frequently major siting decision elements. Necessary scale of operations to insure efficiency and economic feasibility may limit engineering options. Scheduling is often driven by interest rates, financial arrangements, and delivery and labor contracts.

These characteristics of large-scale, centralized, primary natural resource development projects do not mean that implementation alternatives should not or cannot be closely examined. There are cases in which genuine options are available and these options deserve attention.

However, this document is focused on community enhancement. This is consistent with the great bulk of legislative and permitting processes and with the mitigation activities carried out by a variety of institutions.

Mitigation of different types of resource developments

The Bureau of Land Management and other Federal or State agencies manage the use of many resources, including rangeland, wildlife habitat, cultural and recreational resources, watersheds, forests, and minerals. Management of each of these resources affects the human environment and persons who use them. However, the direct human consequences of management changes for several of these programs is quite dispersed, infrequent, minimally intense and not significant in terms of magnitude. Often effects on individuals, rather than communities, are most prominent. For example, individual livestock grazing permittees are most directly affected by rangeland policies and practices. The socioeconomic impacts on communities in many cases are so small that they are immeasurable.

The major BLM activity that can have large-scale, intense, and durable community consequences is leasing and permitting for the development of coal, oil shale, and hard rock resources. These minerals are usually developed by only a single or few proponents, require large-scale operations to be economically feasible, and typically have a large number of employees concentrated in one or two locations. The community impacts of oil and gas development, on the other hand, are generally less straightforward. Such developments involve a large number of firms, each of which employ relatively few employees at exploration and development locations. The activities (exploration, production, maintenance) are often widely dispersed in time and space. This is a much different situation than, for example, coal mining, which carries a more predictable construction and operation schedule as well as concentration of a large number of local employees.

For these reasons, this document is directed toward major, centralized mineral production or conversion activities and their community consequences.

Adequacy of information and certainty of project proposals

As a general rule, it is fair and accurate to state that as information on a project proposal increases, so does the precision and workability of the associated mitigation design. This may be self-evident but deserves attention. There have been occasions in mitigation situations when the match between available information and mitigation proposals has been faulty.

The sequence of considering mineral development proposals in BLM, for example, begins in land use planning. It is seldom feasible, given the many uncertainties, to define specific mitigation strategies at this point in the process. The resource development proposals are so generalized that many broad assumptions would be needed in order to create refined mitigation designs. Nevertheless, socioeconomic mitigation is usually first addressed, primarily in generic terms, in land use planning.

The second stage, activity planning, is more definitive than the land use planning stage in terms of the nature and location of development proposals. In the coal program, for example, tracts are delineated and leasing levels proposed and considered during activity planning. The development of coal leasing proposals presents the first genuine opportunity to project community impacts. These quantified projections provide the magnitude of the community consequences that may occur as a result of developing a tract or series of tracts. The number and types of socio-

economic technical assumptions regarding development are more refined than those that would be made in land use planning. There is more information available on the scale, schedule, and interrelationships between potential developments than has been previously accessible.

Even here, though, at the leasing stage, it is likely that mitigation measures would be quite generalized. There remain many uncertainties on the specifics of the developments. This would most likely be the case when a competitive leasing situation exists and no proponent or developer from the private sector is identified.

Permitting is the final pre-construction phase of the multiple phase management process. While BLM has authority to permit rights-of-way for transmission lines, pipelines, and the like, most energy development permitting activity occurs within other Federal agencies (for example, the Office of Surface Mining) and at the State or local government levels. It is at this stage of development that mitigation measures are most precisely and feasibly planned. Detailed information on the project and the private sector proponent is available. The number and type of assumptions are reduced and refined, allowing more focused and realistic planning among all affected jurisdictions and parties.

The main point here is that there should be correlation between certainty of information on the project and specificity of community mitigation proposals. Detailed mitigation requirements at early stages of the development process are not likely to be effectively focused on the issues that will eventually be identified at later points in the process.

Types of mitigation measures

There are three general types of mitigation measures to enhance community capacity to undergo change. These are: (1) information sharing, (2) cooperation, and (3) direct intervention.

The first type, information sharing, often is not recognized as a mitigation measure in itself, perhaps because of its widespread prevalence. Federal and State agencies, through the environmental assessment process, prepare, with variable specificity, information on the local economic, demographic, fiscal, service-facility, and social consequences of implementing a proposal. This information is distributed to officials and other publics, giving them both an opportunity to respond to the proposals and, as important, an information base for planning.

An example of an information sharing mechanism is the Colorado Cumulative Impacts Task Force designed to assure that Federal, State, and local offices, along with project proponents, work from a common information and analytical base for the projection of socioeconomic effects. This program's implementation meant that all parties agreed on basic baseline information, forecasts on the future without the action, and common assumptions regarding impact projections.

Cooperation is, at least explicitly, less prevalent as a measure than the other two types. This label usually applies to suggestions or requirements that a developer actively coordinate with local representatives on project planning and implementation. For example, it has been proposed

that developers in certain locales provide ongoing reports to and consult with county commissioners and other officials on a periodic basis. Such monitoring processes give local officials an ongoing data base on project status, employment, deviations from previous plans, and effectiveness of mitigation measures that have been put into place. This monitoring approach is now being successfully used in the Gillette, Wyoming area. It is funded by a consortium of companies with projects in the area.

Another example of cooperation, clearly different than information sharing, is the location of a community liaison in the host community. Though generally funded by the company, this person may or may not be a company employee. Regardless, community officials have an available, clearly designated person with whom they can interact.

Direct intervention refers to efforts to enhance the benefits or minimize the negative changes that are expected or have resulted from development. Most discussions of community mitigation center on this type of measure. It is the most visible and expensive of the three types. Examples of direct intervention include employee housing, employee transportation, prepayment of taxes, recreational program assistance, direct financial subsidies, employment preference and similar mechanisms that are designed to help insure that the development avoids jeopardizing community stability or, at least, minimizes disruption. The private sector developer(s) is often the source of this assistance although the funds may pass through State government or other entities before reaching affected localities. An example of pass-through funding is a State severance tax which is targeted to communities affected by nearby development.

Mitigation objectives

Some community processes are subject to mitigation. The timely provision of community services and facilities can be enhanced through special efforts on the part of local officials and the private sector. Housing, schools, transportation, medical care, planning, law enforcement, recreation, and other such requirements fall into this range of development consequences.

Other local effects, however, are not mitigable, or can be only indirectly influenced. Included are community social processes such as the change from informal rural social settings to more urbane, formal relationships, from a relatively homogeneous to a more diverse population, and from a cohesive to a more segmented community. These changes often occur in concert with community growth. Most mitigation interventions do not directly apply in responding to these affects.

Indeed, conventional mitigation measures may contribute to the intensity, duration or magnitude of these local social life changes. An example would be in the field of law enforcement. Increased funding for a local law enforcement agency often results in a larger, more professionalized staff. This in turn may reduce the familiarity and trust that local residents feel toward the agency and its officers, at least during initial construction phases.

There is no reason to avoid acknowledging that some changes associated with community growth are not directly mitigable. They are readily recognizable. These aforementioned types of affects are virtually intrinsic consequences of growth but there is frequently a lack of consensus as to whether, all things considered, these changes are beneficial or adverse. Even within the same household, the effects may be judged beneficial to one person and considered adverse to another. Eventually, these judgements rest on individual and collective values regarding the potential tradeoffs between economic development and possible accompanying social disruption.

Suggested and required measures

It is useful to distinguish between mitigation measures that are suggested by the leasing or permitting agency and those that are required. Suggested measures are mitigation ideas that are not included within the authorities of the authorizing agency. No one is required to implement the program or idea but it is considered to be an approach which would effectively assist in responding to an expected effect.

Required measures may be included in the contract, lease, or permit between the authorizing agency and the developer of the resource. Stipulations attached to a lease are an example of a required measure. One avenue for dealing with the lack of information specificity previously discussed and for complying with some key case law in this area is for the leasing agency to require that the project developer comply with all valid and applicable State and local laws or regulations covering such development, so long

as these requirements neither prohibit nor make uneconomical the proposed operation. This may appear duplicative but in fact bolsters the position of local authorities in terms of their leverage. Symbolically, it makes a clear statement that the authorizing Federal agency has real intentions to require the proponent to cooperate with host communities.

Enforcement of required measures

It has been suggested that insuring that project proponents comply with requirements for off-site community mitigation is problematic. Furthermore, it is widely believed that these requirements are more difficult to enforce than conventional on-site physical, biological, or cultural measures. It is recognized here that social and economic measures are different than more traditional measures in natural resource agency settings that address archaeological, mined land reclamation, water quality, and similar issues.

The main differences between physical-biological measures and socioeconomic measures are straightforward. Physical-biological measures are typically applied to on-site or near-site conditions. Thus, they are readily accessible for compliance information. This facilitates the examination of mitigation activities relative to the requirements. Socioeconomic mitigation programs and processes are implemented off the development site and thus are monitored at the host community or communities.

Other differences follow from this on-site, off-site distinction. BLM lacks jurisdiction over county, board, and municipal functions. Socio-

economic measures are often three-party (agency, proponent, and community) agreements rather than two-party (agency and proponent) agreements. Thus, once a requirement is formalized, the responsibility for its maintenance shifts to the community and the proponent, with BLM in a facilitation-mediation role.

Informal legal opinion from the Interior Solicitor's Office on establishing and maintaining responsibility for compliance with a required measure suggests simply that the requirement: (1) be clearly stated, (2) be precise to the maximum feasible extent on performance standards, and (3) contain remedies involving a claim of breach. (The context of this opinion was in considering a proposed socioeconomic stipulation for a Bureau coal lease.)

An example will serve to clarify these ideas on enforcement. If the Bureau (after identifying an adverse effect, determining an appropriate mechanism to respond to the effect, and establishing responsibility) chooses to intervene, then the following type of special stipulation might be prepared. It is clear, contains performance standards, and carries a remedy for resolution of a grievance.

> The lessee shall submit the following information to the Commissioners of Black Rock County, the Mayor and Council of the City of Quasar, and the Board of the Black Rock-Quasar School District:
>
> > Direct project employment (historical, present, and projected on a quarterly basis) for main contractors and subcontractors and lessee personnel.
> >
> > Estimated indirect local employment (historical, present, and projected on an annual basis).

Total local population attributable to the project (historical, present, and projected on an annual basis).

Number of school children, by grade, attributable to the project (historical, present, and projected on an annual basis).

Local taxes paid by the lessee (historical, present, and projected on an annual basis), by jurisdiction.

This information shall be prepared and submitted on a semi-annual basis during the construction phase of lease operations, and on an annual basis during the production phase of the lease operations.

Representatives of the lessee shall be available to discuss these reports with designated recipients of the reports during regularly scheduled meetings, upon request of the local officials.

Should local officials judge that the lessee has failed to satisfactorily comply with these performance standards, unless otherwise voided or modified by the mutual consent of the affected parties, then they have the right and responsibility to communicate a formal protest to the State Director, Bureau of Land Management. The State Director will in turn utilize all practical means at his disposal to reconcile the situation to the satisfaction of all affected parties.

This example may be an appropriate stipulation in an area of potential Federal mineral leasing in which local governments lack the ability, through State permitting, to acquire timely and relevant project information. As such, it would be valuable to local officials with planning, budgeting, and programming responsibilities. Preparation of such reports would impose minimal cost on the lessee, relative to other measures. Finally, it removes the agency from a direct compliance role and puts it into a reconciliation role between the directly affected parties. Enforcement involves negotiation, with significant leverage available to agency officials.

Even given these practices, however, the question of enforcement of community mitigation measures remains an issue. While the principles are the same as for project site measures, the use of enforceable socioeconomic

stipulations does represent a change from traditional on-site conditions. They represent a commitment of the Federal government to be concerned with local socioeconomic consequences of its resource management decisions. The Bureau's jurisdiction is not extended, but recognition of other, local jurisdictions, and their needs, is explicitly made.

Assumptions in environmental assessments

Treatment of community mitigation in environmental assessments and environmental impact statements is an ongoing issue. Should the preparing agency include such measures in its analysis of effects? Does this depend on the authority of the agency, as to whether the measures are suggested or required? How should measures committed to by the applicant in permitting be incorporated into the assessment?

These are ongoing questions without clearcut or standardized answers. One thing is clear, however. If the preparing agency ignores mitigation measures that will likely be applied, then the portrayal of negative consequences is exaggerated, to the point of being unrealistic.

For example, if BLM is considering coal leasing in a State with strong siting legislation, such as Wyoming or Utah, it is known that the proposal will undergo State review for implementation and that the proponent, directly or indirectly, will be responsible for responding to projected adverse effects. However, the specifics of the measures are unknown at the leasing stage. This places the leasing agency in a potentially awkward situation. The choice may be between (1) projection of unmitigated effects,

which are improbable and may appear severely adverse (at least on paper) or (2) speculation on non-Bureau measures that will be required by other jurisdictions at a later stage in the leasing-permitting process.

The typical approach has been to project an unmitigated future, without incorporating information on mitigation programs that will emerge from State or local review. However, guidance from the Council on Environmental Quality (FR, Vol. 46, No. 55, March 23, 1981, pp. 18026-18039) suggests that "all relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead agency . . .". Furthermore, "to ensure that environmental effects of a proposed action are fairly assessed, the probability of the mitigation measures being implemented must also be discussed."

These statements serve to legitimize more realistic environmental assessments, including socioeconomic assessments. They provide an opening for BLM out of the apparent dilemma described above. Clearly, treatment of socioeconomic mitigation is not simply a matter of "all or nothing," but rather a shaded area in which judgement must be applied.

Chapter III

Roles and Responsibilities of Various Government Levels in Community Mitigation

Introduction

There are historical and ongoing questions on the proper roles of Federal, State, and local governments in community social and economic mitigation. This is natural and predictable as similar questions exist in other public policy areas such as housing, health care, education, welfare, law enforcement, and natural resources. Issues of public budgeting, policy and program direction, degree of centralization, and appropriate level of local autonomy are inherent in the American system of government. Community socioeconomic mitigation is thus merely a single collection of ongoing questions in a host of similar issues spread throughout the multiple levels of government in the United States.

Appreciation of these issues, even as they change and evolve, is essential to persons participating in mitigation processes. Therefore, as an introduction to sections that follow, a summary paper by John Gilmore is presented in this chapter. John Gilmore of the Denver Research Institute has excellent credentials to address this topic. He has been a central figure in social and economic assessments and mitigation of mines, power plants, and military installations in the West for the past decade. His clients have included several government agencies, at all levels, and private sector development firms. He and his colleagues have been active in

growth management, as well as analysis and assessment. His qualifications for interpreting what has happened and what may happen in the future in this field are very solid.

The paper outlines, in a general way, the potentials and limitations of Federal, State, and local authorities in responding to changes brought on by industrialization of rural areas. Gilmore does a good job of capturing the issues, based both on his experiences and empirical findings, in a direct, observational style. There are only a couple of points to be made on the Gilmore paper, which is a clear and balanced presentation on social and economic mitigation roles of several government entities.

First, he does not distinguish between the various Federal agencies with regard to their responsibilities. For example, the Geological Survey, BLM and Office of Surface Mining are each functional USDI participants in the leasing and mining of Federal coal. Yet, each is guided by different pieces of legislation and regulation with fundamentally different mitigation charters as well. Other, similar situations are found throughout the federal government and within the Department of the Interior. The Gilmore paper collapses these organizations into a single, monolithic Federal Government category. This suits the purpose of his paper but it may represent an oversimplification.

Second, his statements on the marginal quality of Interior environmental assessments for community planning purposes are accurate. Recognition of the reasons for these deficiencies is absent, however. BLM's

regional coal assessments, for example, are based on broad assumptions and involve little or no specific evidence on scheduling, proponent, transportation, work force, and similar types of information that would be available in the permitting of a plant or mine. They are not intended to be local planning documents. In concert with ongoing Federal concern about conducting local planning ventures, these factors prohibit the detailed analysis and forecasting for which Gilmore and his associates are often employed.

Thus, improvement of the social and economic sections of some Federal assessments may not be as straightforward as Gilmore has proposed and there are real questions as to whether they should be, given followup permitting at the Federal, State, and local level.

Regardless of these remarks, the paper is a concise and readable overview of the array of issues before participants in community impact mitigation. While one may not agree entirely with its generalizations, its statements are direct and deserving of attention, based as they are on both empirical study and personal observation.

EXHIBIT 1

OBSERVATIONS AND COMMENTS ON THE ROLES OF FEDERAL, STATE, AND LOCAL GOVERNMENTS IN SOCIOECONOMIC IMPACT MITIGATION

Presented at:

Alaska Symposium

on

Social, Economic, and Cultural Impacts of Natural Resource Development

Alaska Pacific University
Anchorage, Alaska

27 August 1982

by:

John S. Gilmore
Senior Research Fellow
Industrial Economics and Management Division
University of Denver Research Institute
Denver, Colorado 80208

OBSERVATIONS AND COMMENTS ON THE ROLES OF FEDERAL, STATE, AND LOCAL GOVERNMENTS IN SOCIOECONOMIC IMPACT MITIGATION

Most talks with titles as ponderous as this one start out specifying assumptions and offering definitions. First, let me specify an assumption I am not making. This paper is not based on the assumption that socioeconomic impact mitigation is needed for every major construction project regardless of location.

Sometimes there are few, if any, discernible socioeconomic problems from large projects. This paper addresses those projects which may be susceptible to significant socioeconomic impacts. My colleagues and I have observed that such projects are usually characterized by remoteness from good-sized towns and from large, skilled construction work forces. They often are being built in regions of very low population density, and they are apt to be projects of a large or very large scale. They may be built in or near communities whose culture is not accustomed to or compatible with large-scale and sudden industrialization and the people it may find necessary to bring in to achieve completion of the projects.

So, many--maybe even most--of the large construction projects in the United States do not raise questions about socioeconomic impacts and impact mitigation. This paper addresses those projects where mitigation may be or clearly is important.

The Meaning of Mitigation

Now, for definitions. Mitigation is here defined as the equitable and timely distribution of the benefits, and avoidance and/or amelioration

of negative socioeconomic effects of industrial activities or projects. These are the positive and negative impacts respectively.

Equitable Distribution of Benefits

The major categories of the potential benefits include new jobs, additional personal income, additional tax base, greater diversity of opportunities and of culture in the community (if this is considered beneficial), and, usually, eventual improvement in public and private facilities and services (see Exhibit I).

The exhibit labels these as potential beneficial socioeconomic effects, and their potential is better realized if they are timely. If many new jobs are available, they may require bringing in outsiders in order to fill skill requirements before there is additional tax base in the affected jurisdiction to generate public revenues for public services. Neither the newcomers nor the old-timers then may be adequately served by local government. Even where there is a local labor pool and job preference agreements can be enforced, e.g., projects on land governed by tribal councils or similar organizations, extensive training may be necessary and may require substantial effort by both appropriate levels of government and the innovators of the industrial activity or project. If there is greater personal income before there are more and better facilities and services, both public and private, prices may be driven up and inflation afflict those who are not enjoying the higher personal incomes.

The potential for the benefits may not be fully realized, then, if the community and the project are not prepared to help make these

EXHIBIT I. POTENTIAL BENEFICIAL SOCIOECONOMIC EFFECTS OR IMPACTS

- New jobs
- Greater personal income
- Additional tax base
- Greater diversity of opportunities and culture in the community (if deemed beneficial)
- More and better facilities and services, both public and private

effects--all of which represent change--beneficial. Furthermore, equitable distribution is not inevitable. To achieve it, the beneficiaries of the positive impacts should largely be the same groups and the same people bearing the negative impacts. This is a considerable challenge to impact management.

Potential Negative Effects

The positive or beneficial effects, which may even be windfalls for some communities or jurisdictions, are usually accepted quietly. The negative effects, on the other hand, are potentially damaging to both the project and the community. They can generate concern and disruption and they certainly challenge business-as-usual management on the part of both government and the project sponsor. These are the problems which can be counted upon to be well-publicized and which bring substantial social and political pressures for mitigation.

We have found three generic categories of negative impacts in the problem-type boom communities we have been involved with. These are:

- Market failures--where existing private sector mechanisms for furnishing goods and services don't work.
- Shortfalls in government facilities and services--where local and possibly state governments find themselves unable to meet their responsibilities of providing for the public health, safety, and welfare of a fast-growing and changing population.
- Social and political disruption--where the normal mechanisms for accommodating population growth are unable to function under extraordinary stress.

These situations, which may exist singly but more often exist in some combination of all three, may well be aggravated by:

- Failures of external institutions or systems which usually help support the community
- Uncertainty

These are described in somewhat more detail in Exhibit II. These are the sorts of problems which, in the lower 48 states, have been found in the Gillettes, the Rock Springs, the Grants, and the Colstrips--the notorious problem boom towns. These have led to political backlash against both the firms sponsoring the projects and against incumbent officials. They have led to project overruns in time and in money. These are the challenges to impact management or impact mitigation.

Some Major Issues of Socioeconomic Impact Mitigation

Three of the major issues concerning mitigation are:

- What are the roles in socioeconomic impact mitigation of the various levels of government?
- What is the role of the firm sponsoring the project or, in more complex cases, the firms sponsoring a number of projects in impact mitigation?
- Should a large-scale project go ahead (a) if mitigation costs to the project are so great that they would make the project economically infeasible or (b) if extensive mitigation is needed but is for some reason impossible?

In reverse order, I hope that the panels and all of us informally will discuss the third question on the problems of projects with mitigation requirements which make a project infeasible, or where mitigation is impossible. On the second issue, Bill Metz will present extensive information on industry mitigation efforts (a brief excerpt from an earlier paper is appended to this paper). Finally, the remainder of this paper will discuss the first issue raised above--the roles of various levels of government in socioeconomic impact mitigation.

EXHIBIT II. GENERIC CATEGORIES OF NEGATIVE EFFECTS OR IMPACTS

- MARKET FAILURES--WHERE SUDDEN INCREASES IN LOCAL DEMAND FOR LABOR, HOUSING, COMMERCIAL CAPITAL, AND PUBLIC CAPITAL ARE NOT MET BY EXISTING MARKET MECHANISMS AT ANY ACCEPTABLE PRICE BECAUSE OF RISK PREMIUMS IN PRICING OR NON-EXISTENT SUPPLY.

- SHORTFALLS IN GOVERNMENT FACILITIES AND SERVICES--WHERE LOCAL (AND POSSIBLY STATE) GOVERNMENTS LACK FISCAL RESOURCES, EXPERTISE, AND EXPERIENCE IN PROVIDING THE SERVICES AND FACILITIES NEEDED TO ACCOMMODATE A GROWING POPULATION, OR WHERE GOVERNMENTS ARE UNWILLING OR UNABLE TO MAKE THE INVESTMENTS NECESSARY TO PROVIDE THEM.

- SOCIAL (AND POLITICAL) DISRUPTION--WHERE EXISTING RELATIONSHIPS AND SYSTEMS BREAK DOWN BECAUSE OF STRESSES FROM GROWTH AND FROM CONFLICT BETWEEN THE EXISTING POPULATION AND THE NEWCOMERS.

COMPLICATED BY:

- INADEQUACIES AND BREAKDOWNS IN EXOGENOUS INSTITUTIONS OR SYSTEMS--EXAMPLES ARE RESPONSE FAILURES IN SECONDARY MORTGAGE MARKETS, GOVERNMENTAL IMPACT ASSISTANCE PROGRAMS, STATE-FURNISHED TRANSPORTATION SYSTEMS, STATE SCHOOL ASSISTANCE PROGRAMS.

- UNCERTAINTY--RESULTING FROM PROBLEMS WITH TECHNOLOGY, MARKETS, PROJECT SPONSOR'S CASH FLOW, LABOR, WEATHER, REGULATION, SUPPLIERS, OR LACK OF CREDIBLE INFORMATION ON PROJECT EMPLOYMENT LEVELS AND SCHEDULES.

Roles of Levels of Government

The discussion will be based on several criteria, leading to generalizations comparing roles and capabilities and on subjective comments (see Exhibit III). The criteria are:

- Responsibilities
- Authority to mitigate or require mitigation
- Limitations observed in at least some cases
- Examples of strengths and weaknesses

Federal, state, and local government mitigation roles will be compared by these criteria. The comments on state governments are to some extent applicable to Indian tribes as court decisions continue to expand the taxing and regulatory authority of tribal organizations; however, there is so much variation among the tribal governments that it is less useful to generalize about them than generalizing about the considerably different state and local governments.

The federal government. The federal government's responsibilities often result from its actions which trigger socioeconomic impacts. These include making resources available on federal lands, issuing permits for activities on federal lands or in other fields of regulation such as nuclear power plants, or in legislating changes in the siting factors relevant to the location of industrial activity, e.g., the Clean Air Act. The federal government may also bring about socioeconomic impacts as a result of the location and construction of its own facilities, such as many of the schemes for the proposed MX missile system.

The federal government's authority to become at least peripherally involved in impact mitigation comes most broadly from the National

EXHIBIT III. COMPARISON OF FEDERAL, STATE, AND LOCAL GOVERNMENT ROLES AND CAPABILITIES FOR SOCIOECONOMIC IMPACT MITIGATION

Criteria for Comparison / Level of Government	Responsibilities	Authority to Mitigate or Require Mitigation	Limitations Observed in At Least Some Cases	Examples of Strengths and Weaknesses	Author's Subjective Comment
Federal	Take many triggering actions, requiring mitigation.	NEPA, in some cases. Special programs.	Little or no money in special programs and little authority under NEPA.	General mitigation programs have inadequate political constituency. Limited responsiveness. Poor EISs.	Most resources, least responsiveness (sometimes least comprehension).
State	Public health, safety, and welfare. Establish structure of state and local government.	Police power and broad taxing authority. Transfer federal and state funds. May have siting, impact assistance programs.	May have inflexible constitutional inhibitions. Currently facing loss of accustomed federal funds. Often have retention problems of good senior staff.	Legislatures often responsive, but not anticipatory. Have access to varied taxes and some land royalties.	Best balance of authority, responsiveness, and resources. Needs help from both feds and locals.
Local	Deliver many health, safety, and welfare services.	Police power and tax authority to extent delegated by state. Substantial role in land use control, in most cases.	Often understaffed and able to handle only routine matters. Sometimes uncooperative with other jurisdictions. Overemphasize fiscal problems. Municipalities often bear public costs but can't capture revenues from projects.	Volatility and unpredictability can make difficulties for project and other private investors. Most urgent and important role is cooperating in mitigation planning, implementation, and monitoring.	Most responsiveness, least resources.

Environmental Policy Act of 1969 and its requirement for environmental impact statements (EISs), including discussions of socioeconomic impacts. Certain governmental regulatory processes are, in fact, based on information carried in the environmental impact statements, including regulatory actions by the Nuclear Regulatory Commission, the old Federal Power Commission and its successor agencies, and various agencies in the Department of Interior. The authority to participate in mitigation activities was granted federal agencies under the Coastal Zone Management Act, Section 601 of the Coal Conversion Act, and in the supporting legislation authorizing and appropriating funds for such specialized projects as deployment of the Trident weapons system.

There are several limitations, practically speaking, on all of these authorities. In most cases, the lead agencies preparing EISs do not require mitigation of any impacts off the site of the activity they are acting on. The Office of Surface Mining attempted to impose socioeconomic impact mitigation stipulations on the Rojo Caballo Mine in Wyoming, but this effort was blocked by the Department of Interior. Other federal permitting agencies have generally been hesitant to take this authority very far.

Both the Coastal Zone Management Act mitigation program and the Section 601 program have largely come to a halt as a result of federal decisions to neither budget nor appropriate funds for their continuation. A very partial substitute would be action by either executive or legislative branches assuming current deductibility from corporate income tax of industrial costs of mitigation. The mitigation efforts for the Trident deployment in Kitsap County, Washington, were largely limited to money

for bricks and mortar and made no provision for the costs of operating and maintaining the new facilities--which some local people found inappropriate as delay followed delay in the deployment.

My subjective view of the strengths and weaknesses of federal impact mitigation measures includes the following. The majority of the members of Congress are not from nor are they representing communities which consider themselves vulnerable to negative socioeconomic impacts from industrialization. Therefore, it seems unlikely that they will provide for anything but selective impact assistance/mitigation programs, such as those connected with weapons systems deployment or very large federal projects.

So far, such federal programs have generally been based on forecasts and future-oriented assessments, such as those in EISs, and in socioeconomic matters these statements are usually inadequate. More specifically, EISs rarely address socioeconomic impact mitigation needs with accuracy nor attempt to place responsibilities for mitigating them. This could, of course, be improved if the EIS described longer term mitigation programs more responsive to the monitoring of changes in projects and thus to changes from impacts originally anticipated. It is doubtful that a statement prepared by a federal agency can afford, politically, to specify the nature of many socioeconomic problems and the responsibility for dealing with them, and some EISs tend to parrot boom town conventional wisdom or conventional mythology rather than to do careful analysis and forecasting.

Finally, some of the federal assistance programs have been at best erratic in their application. The Coastal Zone Management program

has been successful in some states, but others have found it to be a bureaucratic nightmare, and the 601 program has been largely oriented to certain types of bricks and mortar construction without necessarily being responsive to local needs, e.g., for indoor recreation facilities in cold climates.

My personal and admittedly subjective comments on federal government roles are that environmental impact statements could be made much more effective in analyzing baseline conditions and in specifying the likelihood of various types of negative impacts. They also would be greatly improved if they dealt with net impacts, allowing for mitigation efforts included in the proposed action by the project sponsor rather than producing what are often "worst case" analyses, even though they may not be specified as such. And, quite importantly, most of the statements I have read recently fail to adequately handle the beneficial effects.

Another potential federal role is in dealing with a newly developing problem, both in some of the lower 48 states and, from what I recently read, in Alaska: the difficulty in explaining to foreign firms and investors the need for money to be spent by a firm on mitigating socioeconomic impacts. Federal government spokesmen may enjoy credibility with foreign investors whether or not they have it with state and local government people in this field of socioeconomic impact mitigation.

My summary comment on the federal government's role is that it is the level of government with the most resources but with the least responsiveness to local needs and occasionally the least comprehension of the local situation. However, it is the only entity with the resources

to provide the mitigation assistance necessary on very large-scale projects justified by and clearly identified with the national interest.

State government. The primary responsibility of state government is to provide for the public health, safety, and welfare, and some of this function (including some of their police power) is delegated to local governments. The states also are responsible for implementing some federal programs, and some states have legislated roles for themselves in the siting and permitting of various projects and industrial activities and in providing socioeconomic impact assistance programs.

The states have authority to levy many types of taxes, and some parts of their taxing authority are also delegated to local government. The states transfer both federal and state funds to local government. They retain the authority and furnish the financing for most highway construction and maintenance, courts, corrections, and other services. Some states have their own environmental policy acts and a variety of types of land use authority which they usually share with local government.

Some states are limited in what they can do to carry out their responsibilities with constitutional inhibitions on incurring debt or transferring state funds to local government. Many states have imposed spending limits upon themselves and all presently face the decline or loss of federal funds which they have counted upon in recent years. The quality of expertise available in state government varies. Many of the states find it easy to recruit bright young public administrators and planners, but it is often difficult for them to keep experienced public managers because of rigid personnel systems and salary ceilings.

Many of the states, through their legislatures, are responsive to new problems, although this is usually more in a reactive mode than in anticipation. Exceptions occur if an announced future project is frightening enough, e.g., the request by a utility for enough State of North Dakota water to supply 20 coal gasification plants. Legislators can be counted upon to respond quickly if enough of their constituencies seek help. They are in a position to legislate taxes where these are politically acceptable and they often have access to royalties from their own or federal lands. Under the reserved rights doctrine, many states probably have more versatility to deal with problems than they take advantage of.

The states probably have the best balance of authority and responsibility and resources to deal with socioeconomic impacts. However, they need cooperation from both federal and local government as well as from the sponsors of the impacting projects to be able to carry out effective mitigation. Some experimental state institutions are currently seeking to achieve this cooperation voluntarily (rather than through the police power), e.g., the Utah Process, the Colorado Joint Review Process.

Local government. Counties, townships, boroughs, cities, special districts, and towns have many of the responsibilities for public health and safety and some welfare activities delegated to them, plus education, streets, and other locally used public facilities and services.

Local governments have some authority delegated them by the states under the police power and usually taxing power with substantial limitations, although this varies greatly from state to state. Local governments usually administer land use controls, sometimes in concert

with the states and sometimes with considerable delegation of authority to the local entity, and this authority may provide for some industrial permitting and socioeconomic mitigation stipulations by the local governments.

Many local governments, particularly in small communities, are understaffed and self-limited to handling routine matters. Elected officials may have great concentrations of available authority, e.g., county commissioners in some states may have executive, legislative, and quasi-judicial authority. However, a change in the makeup of such a small group as a board of county commissioners makes the standards and precedents which they set volatile and subject to change. Local governmental entities are often uncooperative with other jurisdictions, and it is particularly unusual for one to share its tax revenues with another. This presents a particular problem for a municipality which houses the people involved in construction and operation of a new industrial activity, but which doesn't have any ability to capture ad valorem or excise tax revenues generated by that facility or activity.

The strengths and weaknesses of local government start out with the fact that local government is usually closest to socioeconomic problems but is apt to have the least resources for anticipating, understanding, and solving these problems. The volatility and unpredictability of local government actions in the absence of state or federal standards or requirements may make it difficult for incoming industry or any other private investors to carry out their roles effectively. Local elected officials are apt to concentrate only on negative fiscal impacts which affect their budgeting and may or may not seek help from various

constituencies in identifying and dealing with other types of negative impacts.

Subjectively speaking, local governments will be most responsive (often reacting after the fact) to socioeconomic problems, but usually have the least resources with which to deal with them. An urgent role for local government is to participate and cooperate with the other parties-at-interest in mitigation planning, implementation, and monitoring.

Summary and Conclusion

I have raised three of the major issues concerning socioeconomic mitigation:

- What are the roles of various levels of government in socioeconomic mitigation?
- What is the role of the firm or, in more complex cases, the firms sponsoring projects in a given region?
- Should a project go ahead if prospective socioeconomic mitigation costs to the firm apparently make that project not economically feasible or if adequate mitigation is impossible?

This paper has dealt only with the first, the roles of the three levels of government.

The federal government during the Nixon, Ford, Carter, and Reagan administrations has not been very responsive or dependable as a source of help in socioeconomic impact mitigation. Probably the simplest fix that could come by executive branch action would be useful socioeconomic sections in EISs, but this mere compliance with existing law would require staff additions which are presumably limited by the present budgetary situation.

Local government certainly must participate and cooperate in socioeconomic impact mitigation efforts, but it's a dangerous gamble for

both the incoming project(s) and the communities themselves if local governments have a lead role which gives them too much responsibility without adequate authority, standards, and resources.

The states appear to have the best balance of authority, responsibility, responsiveness, and resources. The states, however, must be able to count on assistance from both federal and local government, as well as from industry, if we are to see socioeconomic mitigation adequately protecting both communities and industrialization efforts in communities which are susceptible to significant impacts.

APPENDIX*

Impact Management

I'll move toward concluding by suggesting that this Rocky Mountain Region is evidently more vulnerable to boom town problems than the rest of the lower 48 states. I'll also suggest that an increasing body of managerial knowledge is evolving for anticipating, avoiding, or dealing with these problems. This is impact management, the function of assuring that the three population accommodation mechanisms do not break down, or of finding substitutes for them.

First, in greatly simplified form, is our socioeconomic impact management format or checklist (Exhibit IV). I'll concentrate on the Reconnaissance stage, which is designed to warn if there may be boom town problems in an area (if so, a greater management effort is needed) or if the prospective project is probably home free.

This map (Exhibit V) shows two things: (1) population density and (2) the locations of 12 power plant construction projects where we recently did retrospective case studies of socioeconomic impacts. The tendency of project management to spend money on impact mitigation/management efforts varied inversely with population density, as shown in Exhibit VI. The projects with mitigation programs are checked. (The seeming exception, Bellefonte, is a large nuclear plant with a very large work force. The others, except for San Onofre, are fossil-fueled plants.)

---

*Excerpted from John S. Gilmore, "Socioeconomic Implications of Changing Energy Conditions," Regional Energy Issues: An Invitational Seminar of the Conference Board, Denver, Colorado, March 18, 1981.

EXHIBIT IV. SOCIOECONOMIC IMPACT MANAGEMENT FORMAT

Preliminary Vulnerability Reconnaissance

1) Characteristics of entering firm or industry projects(s)
2) Preliminary regional reconnaissance and screening, leading to first approximation of impact area/impact center(s)
3) First approximation needs identification and identification of positive impacts
4) Define analyses needed
5) Identification of obvious project-related conflicts

Vulnerability Analysis

1) Party-at-interest and constituency identification
2) Analysis of impact centers, now and in future
3) Analysis by generic categories of negative impacts

Comparisons of Communities, vulnerabilities and strengths

Remedial Analysis and Impact Management Design

1) Responsibility and capability analysis, by generic growth management functions
2) Unmet needs, present and prospective
3) Intervention requirements
4) Needed institutional inventions
5) Test management design(s) against uncertainty

Assessment of Residual (or Net) Negative and Positive Impacts

Overall Growth Management Implementation

1) Negotiations
2) Actions by individual parties-at-interest
3) Institutions for cooperative actions
4) Cooperative actions by several parties, including remedial distribution of positive impacts
5) Monitoring and revision

EXHIBIT V. LOCATIONS OF CASE STUDY SITES

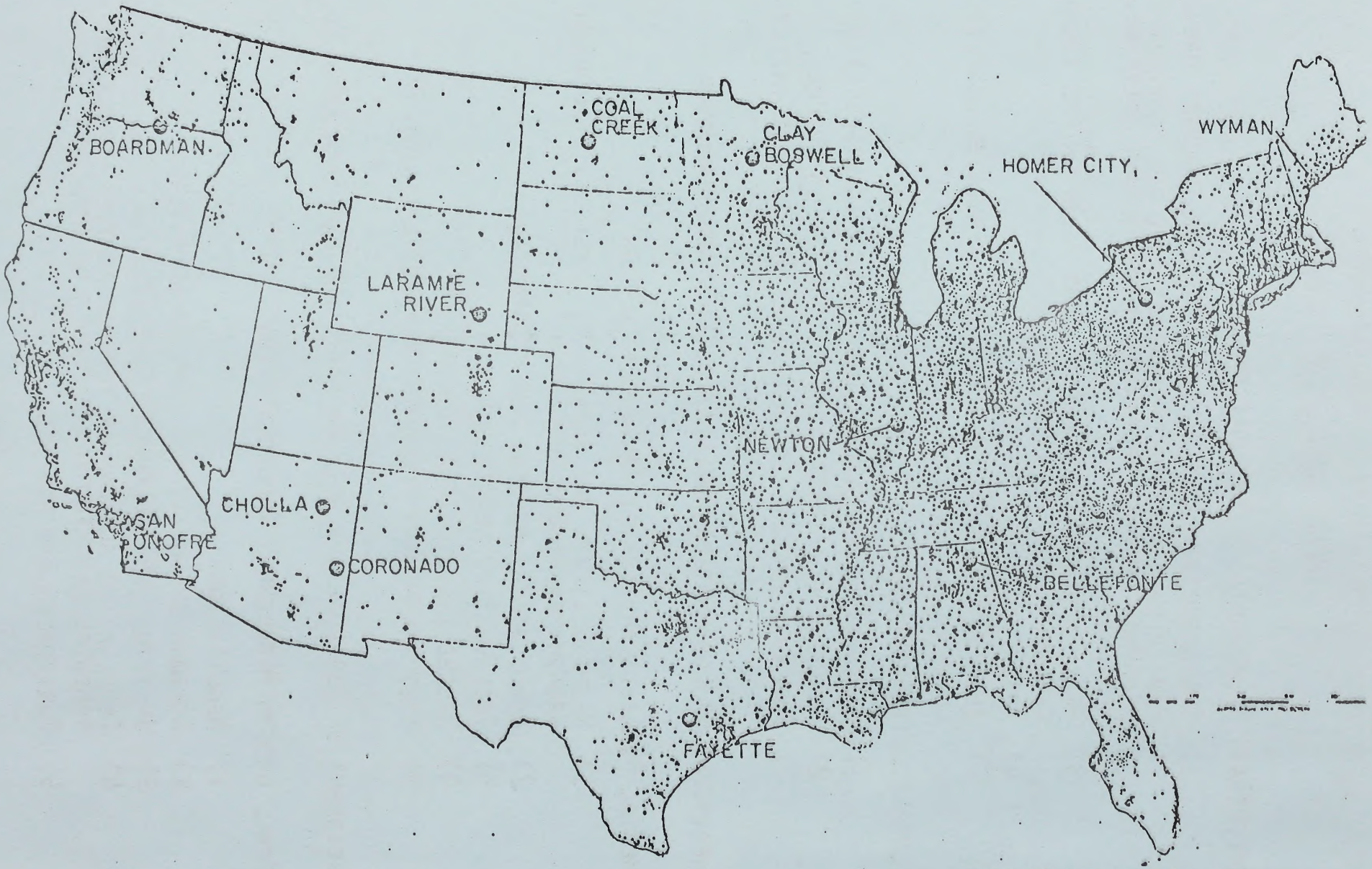


EXHIBIT VI. POPULATION DENSITIES OF POWER PLANT STUDY AREAS AND IMPACT MITIGATION LEVELS DURING CONSTRUCTION

CASE	LOCATION OF PLANT	PEOPLE PER SQUARE MILE IN IMMEDIATE COUNTY	
San Onofre	San Diego Co., California	319	
Wyman	Cumberland Co., Maine	219	
Homer City	Indiana Co., Pennsylvania	96	
Bellefonte*	Jackson Co., Alabama	36	✓*
Newton	Jasper Co., Illinois	22	✓
Fayette	Fayette Co., Texas	19	
Clay Boswell	Itasca Co., Minnesota	13	✓
Coal Creek	McLean Co., North Dakota	5	✓
Cholla	Navajo Co., Arizona	5	✓
Coronado	Apache Co., Arizona	3	✓✓
Laramie River	Platte Co., Wyoming	3	✓✓
Boardman	Morrow Co., Oregon	3	✓✓

✓ Some mitigation

✓✓ Considerable mitigation

*Very large work force for nuclear plant.

Source: EPRI Report

So, given our low population densities, the Rocky Mountain states are, potentially, socioeconomic impact country. The Colorado Front Range, the Wasatch Front, and the Phoenix-Tucson area are exceptions. Generally, however, the more remote communities in this region are apt to have trouble absorbing or diffusing population in-migration attracted by large energy projects. Parts of Central Appalachia offer the only major counterpart in other resource-rich regions.

Examination of highway networks and Census reports are the next Reconnaissance task. Finally, a check of who else (or what else) is in the neighborhood is useful. Are there potential or actual resource use conflicts? Cultural conflicts? Does a locality have recent history of industrialization, or no such history?

If a firm is planning a large project in what is identifiable as impact country, the existence of preconditions and project characteristics for boom town problems can be checked, and the project characteristics can be reviewed. These, as displayed in Exhibits VII and VIII, have been precursors of bad boom town situations.* (These again are drawn from observation and experience.) They are largely self-explanatory.

If a project is proposed for a locality in impact country where some of these preconditions or characteristics exist, more extensive socioeconomic impact management efforts are doubtless indicated.

Such impact management is not broadly customary. It requires innovative, politically sensitive managerial talent. It inevitably takes

---

*These were all "business-as-usual" boom towns, e.g., nobody did anything out of the ordinary to prepare for extraordinary events.

EXHIBIT VII.
PRECONDITIONS FOR VULNERABILITY:
BUSINESS-AS-USUAL BOOM TOWN PHENOMENA

- Short Notice of Project
- Little Preparation by Local Government or Industry
- No Planning Process in Community
- Limited Local Government Facilities, Expertise

EXHIBIT VIII.
DANGEROUS CHARACTERISTICS OF INCOMING PROJECT

- Construction Work Force In-Migration Leading to Population Growth Rates of 15% or More for Years
- High Differentials Between Temporary Construction-Induced Population and Permanent Population Increment (e.g., 5 or 10 to 1)
- Fragmented Project Ownership and Management
- Project Management Posture Leading State or Locals to Infer "They Won't Listen" or "They say 'That's Your Problem'."

place under conditions of great uncertainty. It's no easier to do well than other management functions. But it can be important--short term and long term.

Chapter IV

Community Mitigation and the Bureau of Land Management

Overview of Chapter

This chapter is divided into three sections. The first section describes several general principles and practices which are relevant to BLM socio-economic mitigation activities.

The second section identifies the legislative-regulatory background which affects socioeconomic mitigation in the BLM minerals programs. The following laws and regulations are discussed: the National Environmental Policy Act (NEPA); the Council on Environmental Quality Regulations on NEPA; The Federal Land Policy and Management Act (FLPMA); The Mineral Leasing Act (MLA); and The Federal Coal Leasing Amendments Act (FCLAA). Two other programs, payments-in-lieu of taxes and Oregon and California forest lands revenues distribution, are not included because these are non-mineral, formula-based programs only indirectly tied to the themes of this Guide.

The third section includes examples of BLM socioeconomic mitigation activities in the oil shale program. Altnough several BLM field offices have addressed community impact mitigation issues, the examples are drawn from Colorado where a variety of approacnes were used to facilitate mitigation of potential adverse community effects associated with oil shale development.

General Principles and Practices

1. Primary responsibility for community mitigation rests with State and local government.

BLM's role in community social and economic mitigation is secondary to State and local units of government. Councilpersons, commissioners, State legislators, and other officials are ultimately responsible for providing services and facilities at the community level.

BLM, and the Department of the Interior, may provide information and other assistance, sanction local activities, legitimize community and project proponent agreements, and cooperate with responsible officials to the fullest extent feasible. However, Federal representatives must be aware and respectful of local autonomy and authority. Just as Interior officials are accountable for Federal programs and sensitive to their mandated roles in resource development, so must they recognize the proprieties of local discretionary decision making. To do otherwise would be a form of preemption.

2. Identification and assessment of local socio-economic effects is required by law.

The National Environmental Policy Act requires that environmental impact statements be prepared in tandem with major Federal resource decisions having a significant impact on the human environment. The Federal Coal Leasing Amendments Act requires Secretarial consideration of local social

and economic effects of potential coal leasing. Thus, BLM has a legal requirement to document probable social and economic consequences of its major actions.

Information preparation and distribution are, in themselves, forms of mitigation assistance because non-Bureau institutions are enabled to make better informed judgements.

3. Consideration of local perspectives is a required, essential aspect of BLM planning and decision making.

Opportunity for participation by non-Bureau officials is built into the National Environmental Policy Act, Federal Land Policy and Management Act, and Mineral Leasing Act decision processes. By providing State and local officials with the opportunity to participate in decision making, BLM and Interior are thus obligated to be most deliberate in assuring that Federal resource development decisions are consistent, to the extent possible, with local (State, local, and tribal) interests. This concept is codified in FLPMA with regard to BLM's land-use planning.

4. Provisions for community expansion and for revenue distribution are provided for by law.

The Bureau provides for community expansion in accordance with FLPMA. It also redistributes 50% percent of the Federal government's mineral leasing revenues to State jurisdictions as prescribed by Section 35 of the Mineral Leasing Act of 1920, as amended.

In these cases, the Bureau's mitigation action has been largely routinized, is expressly authorized in legislation, and represents a continuation of existing approaches. There is no discretion whatsoever in the distribution of mineral revenues under Section 35 of the Mineral Leasing Act.

FLPMA is the legislative basis for the Bureau's position on community expansion. Sections 203 (f)(2), Sales, and 212, Recreation and Public Purposes Act, provide BLM with the authority and ability to transfer responsibility for land management to local governments and organizations.

Thus, both of these principles are reaffirmations of historical and existing mitigation approaches, sanctioned by the Congress.

5. Memoranda of understanding have been used effectively to address socioeconomic mitigation issues.

Memoranda of understanding between BLM officials and State and local officials have been used effectively in addressing mitigation issues. These mechanisms are widely used at both the national and field office levels within BLM for cooperation in research, personnel exchanges, management of land areas, and the like. Furthermore, memoranda of understanding have been previously used in community impact mitigation by BLM field offices.

Memoranda of understanding are nonprocurement, nonmonetary agreements. Due to the Cooperative Agreements and Grants Act, cooperative agreements are now defined in terms of procurements and monetary exchanges. Relative to community mitigation, the proper general instrument is thus a memorandum of

understanding. However, cooperative agreements involving transfer of funds may be included as specific measures under a broader memorandum of understanding.

Several examples may be useful in showing how memoranda of understanding may be used in addressing socioeconomic mitigation issues. BLM, at the national level, has signed a series of memoranda of understanding with western governors with the objective of creating Regional Coal Teams and assuring State participation in the Federal coal leasing processes. These memoranda are widely acknowledged as effective means for acquiring State government involvement in coal leasing, including consideration of their concerns about community impacts.

Another example which focuses directly on community impact mitigation is the memorandum of understanding between the BLM State Director of Colorado and the County Commissioners of Rio Blanco County, Colorado, signed in 1977. This agreement requires BLM to enforce county land-use controls on Federal mineral leases in that county (See Exhibit 2). It covers pollution control ordinances, waste disposal restrictions, building codes, and subdivision regulations. However, zoning requirements were excluded and this brings up an important qualification in the use of memoranda of understanding. Even though this agreement preceded Ventura vs. Gulf, a key court decision, it appears to be consistent with that ruling. Localities may regulate the use of Federal lands but, according to Ventura, they can not prohibit mineral development on the Federal domain and local regulations must be consistent with authorized Federal land use decisions. (Ventura

is covered in greater detail in Chapter X of this Reference Guide.) This is also compatible with FLPMA's consistency requirement in Section 202.

The essence here is that memoranda of understanding can be an effective way, both practically and legally, to sanction some measure of local autonomy relative to Federal leasing. Such agreements legitimize local regulation but fall short of abdication of congressionally-mandated leasing responsibilities. They clearly can be in the interests of local officials and present opportunities for BLM officials to provide a service to these clients. Project proponents may also benefit as there is less uncertainty with regard to expectations of their responsibilities.

o. Thresholds have been used to address socioeconomic mitigation issues.

Thresholds or carrying capacities may be established in planning and decision documents to mitigate adverse impacts. Generally a threshold defines a change in conditions which will constrain a decision or will trigger a re-examination of a decision.

For example, in the proposed Resource Management Plan (RMP) for the Piceance Basin in Colorado, thresholds are identified as necessary for mitigating adverse impacts on air quality, water quality, wildlife habitat and community stability and growth. The thresholds are intended to constrain the oil shale leasing and development schedule in the area. They are not, however, inflexible. In other words, as development occurs and impacts are monitored, these carrying capacities would be reevaluated and raised or lowered as determined appropriate based on actual experience.

The concept of a population growth threshold is included to address concerns about potential adverse community impacts. The proposed plan states that prior to leasing oil shale, potentially affected communities would be examined to determine their capability to absorb new people. The actual "threshold" growth rate would be determined in consultation with local officials of the affected communities. If projected growth rates are expected to exceed this threshold, leasing could be deferred or staggered. Guidelines are provided for the threshold rate of growth likely to have a significantly burdensome effect on communities (somewhere in the range of 5% to 15%). A 5% population growth rate was identified as a signal for caution in assuring that social and economic impacts would not be excessive. A 10% or higher growth rate was identified as critical and suggested that postponement or staggered development might be in order. In essence, the community growth threshold concept established in the RMP serves as a decision criteria to be applied in activity planning.

7. Special stipulations have been used to address socioeconomic mitigation issues.

Special stipulations (conditions attached to a lease or permit) are generally used as a technique for mitigating on-site physical and biological impacts associated with an authorized use. Bureau offices have, in a few select cases, adopted special mineral lease stipulations proposed by affected State, tribal, or local governmental bodies to help them carry out their responsibilities in mitigating off-site community impacts. The impacts in these situations have been reasonably and directly related, in a cause and effect manner, to the BLM action. Such stipulations have been

used in only a few unique cases by BLM. In these cases, State and local officials believed Federal support was necessary to assist in dealing with rapid growth brought on by Bureau actions.

Such stipulated measures have included those that facilitate the exchange of information by requiring routine reports from the lessee to the community, promote cooperation by requiring the designation of a community liaison, and insure lessee compliance with valid and applicable State and local laws, regulations and ordinances. Bureau officials have not adopted lease stipulations that require lessees to prepay taxes or otherwise finance the delivery of community services to a State or its political subdivisions.

Historically, BLM has been reluctant to employ stipulations to address community effects. This reflects uncertainty regarding the authority of the BLM to directly participate in mitigating off-site community impacts (beyond the sharing of revenues with States). In other words, this is a State and local function and Federal interference is considered, in most cases, to be inappropriate. Furthermore there is concern about stipulations being unnecessarily burdensome on the lessee. Several factors are important when considering past use of special stipulations.

First, special stipulations addressing socioeconomic impacts have not been employed on a Bureauwide or standardized basis. Several of the western States have sufficient regulatory processes to make such requirements unnecessary.

Second, only those stipulations submitted or suggested by governing authorities, including State, tribal, county, and municipal authorities, have been given consideration. Proposals received from voluntary associations or individuals have not been considered unless endorsed or promoted by local officials.

Third, special stipulations regarding information exchange have been approved with relatively little controversy in part because such measures are desired by the community and impose only minimal cost on proponents.

Fourth, it has become a fairly common though not standard practice for BLM to include a stipulation in its mineral leases requiring compliance with "valid and applicable" State and local requirements. Such stipulations address the Ventura vs. Gulf provision that local laws and regulations affecting use of Federal lands must not impermissibly conflict with a congressionally authorized land use. Local requirements may modify or regulate Federal land use and mineral leasing, but they may not, according to Ventura, determine land use. Thus, local requirements may be otherwise legal but lack applicability to Federal lessees. For a more complete discussion of the so-called "Ventura stipulation", see Chapter X.

Finally, stipulations involving direct monetary transfers have not been applied. Redistribution of funds back to the States is specifically provided for in Section 35 of the Mineral Leasing Act. It has thus been reasoned that Congress did not intend the Secretary to require additional funding under the broad, discretionary authority of the Section 30 public welfare clause of MLA. It is generally left to local officials and

developers to work out arrangements on tax revenues and expenditures. With respect to Indian tribes, this issue remains unsettled. Chapter X of this guide contains further interpretation of the relationship between Sections 30 and 35.

In summary, it should be evident that special stipulations may be legitimate in certain situations but may not be useful or required in most cases. For local BLM officials, it is a discretionary activity and depends to a great extent on the particular circumstances of each case. Stipulations proposed by governmental entities have been considered but submissions from nongovernment groups or persons have not been. A variety of stipulations have been considered and adopted but requirements for direct money transfers through special stipulations have been considered inconsistent with Congressional intent.

The Bureau must attempt to reconcile key court decisions (Ventura vs. Gulf), legislation (FLPMA, NEPA, and the MLA), Congressional intent, and State, tribal, and local government interests in dealing effectively with community changes occasioned by Federal mineral leasing.

Legislative-regulatory background

1. The National Environmental Policy Act (NEPA)

NEPA was passed in 1969 and signed into law in 1970. It lays out broad public policy in environmental affairs. Toward achieving improvements in environmental quality, it requires the preparation of environmental impact statements (Section 102) under certain conditions. It also created the Council on Environmental Quality (Title II).

NEPA itself does not explicitly address mitigation in its environmental impact statement section. However, because alternatives to the proposed action must be included in the statements and these alternatives represent differences in project design, there is no doubt that the legislation acknowledges mitigation potentials in Section 102 as well as the broad policy language of Section 101.

NEPA itself, though lacking mitigation language in environmental impact statement preparation, requires analysis and information-sharing. These are, in themselves, mitigation measures of the information-sharing type and are essential stages in eventual implementation of mitigation measures. Beyond these functions, however, there is no specific authority resting in NEPA which mandates agencies to actively address adverse effects through intervention.

2. Council on Environmental Quality (CEQ) Regulations for Implementing the National Environmental Policy Act

These regulations, located in 40 CFR, Chapter V. Part 1500, govern agency preparation of environmental impact statements and the implementation of other aspects of NEPA. They were revised in 1978, after all involved Federal institutions had been provided several years to initially implement the National Environmental Policy Act. Section 102 of NEPA is the legislative basis for the environmental impact statement regulations. Each Federal department has, in turn, created departmental guidance as a means of assuring compliance with these government-wide guidelines.

Part 1502, focusing on environmental impact statements, contains very little information on mitigation, of whatever type. Section 1502.14(f), which outlines the development of the alternatives, states that agencies shall "include appropriate mitigation measures not already included in the proposed action or alternatives." Section 1502.16(h), Environmental Consequences, requires discussions of mitigation measures if such measures are not covered in the alternatives section.

These two minor references are the only CEQ statements on mitigation in its Part 1502, environmental impact statement, regulations. Given the generality of the regulations, this is understandable. Departments and agencies are informed that mitigation must be considered in the EIS but they are given discretion as to how this is to be accomplished.

Part 1508, Terminology and Index, directly defines mitigation. Section 1508.20, Mitigation, States that mitigation includes:

> (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
> (b) Minimizing impact by limiting the degree or magnitude of the action and its implementation.
> (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
> (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
> (e) Compensating for the impact by replacing or providing substitute resources or environments.

By covering mitigation in its several potential dimensions, CEQ has defined its scope in environmental impact statements, making it clear that a variety of approaches is appropriate to consider, and - tied to Part 1502 discussions - providing a framework for agencies to use to explicitly address mitigation in decisionmaking.

The Department of the Interior's guidance on NEPA implementation (Part 516, Departmental Manual) reinforces the idea of incorporating mitgation into alternatives thus implying that the agency has the authoritiy to implement and enforce mitigation measures:

> B. Mitigation measures are not necessarily independent of the proposed action and its alternatives and should be incorporated into and analyzed as part of the proposal and appropriate alternatives. Where appropriate, major mitigation measures may be identified and analyzed as separate alternatives in and of themselves wnere the environmental consequences are distinct and signficant enough to warrant separate evaluation.

3. Federal Land Policy and Management Act (FLPMA)

Legislative action on BLM's organic act was completed in 1976. Mitigation receives express treatment in only one key section - Section 317, Mineral Revenues - but more oblique references are located in several sections of the act. The discussion below highlights the content of FLPMA relative to community mitigation.

Section 202

The land use planning section, 202, requires the Secretary to coordinate BLM's planning with other Federal agencies and with State, local, and tribal planning activities. The Secretary is also directed to keep apprised of State, local, and tribal resource programs and to consider these programs in the preparation of land use plans for the public lands. Furthermore, "land use plans of the Secretary ... shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act (202 (c)(9))." Thus Section 202 of FLPMA provides potentially powerful, though qualified, mechanisms for State, local, and tribal governments to use in influencing BLM decisions made through the land use planning process, including community impact mitigation.

First, the coordination and consideration requirements provide a source of influence for State, local, and tribal officials. If local planning and resource programming is active, then BLM must take into consideration those activities in its planning. This gives these non-BLM officials several clear-cut points to influence BLM planning and decision making.

Second, the consistency requirement - though not absolute - is an even stronger point of influence for State, local, and tribal governments. In concept at least, the preparation of local land use plans for areas near or abounding public lands could exert substantial influence on BLM planning. BLM would thus be in a coordinative planning position relative to other governmental units.

There is an important qualification in the consistency requirement and it deserves treatment. The language of FLPMA states that BLM plans should be locally consistent "to the maximum extent ... with Federal law and the purposes of this Act." This passage means that Congressionally-mandated programs cannot be prohibited by lower levels of government. Local interests must be considered but not necessarily prevail over national interest. BLM is required to make good faith, genuine efforts to be consistent with local land use planning efforts to the maximum extent feasible.

This is a key factor in sorting out the implications of the Ventura decision, covered in Chapter X in this Reference Guide. The key distinction is local regulation rather than determination. Local units can regulate land use on public lands, but even given FLPMA's consistency requirement, these units are unable to deny or effectively prohibit uses driven by Congressional mandate.

Section 203

Section 203 of FLPMA covers land sales. One of the major criteria for sales is community expansion and economic development. Thus, if a community

is unable to physically expand due to unavailability of land or other conditions (excessive local land prices), then BLM is authorized to sell land to relieve the problem.

This mechanism has been successfully used by BLM officials to assist a community in dealing with expected rapid growth. Rangely, Colorado, faced a situation in which a small number of local landowners had insisted on very high prices for land suitable for residential conversion. There were simply no reasonable alternatives. Local and BLM officials executed a transaction for a tract of land adjacent to Rangely, which was designated for subdivision and which was sold by BLM at a fair market value price to the city. This was a mitigation effort of substantial value to Rangely officials.

Section 206

Exchanges are discussed in Section 206 of FLPMA. As with sales, there may be situations in which public lands are most effectively used by other parties, including communities. There may be cases in which an exchange would enhance the ability of a community to respond to population growth and BLM would be able to provide such land in exchange for comparable parcels.

Section 212

Section 212 amends the Recreation and Public Purposes Act of 1926, which provides access to public lands for State park agencies, local recreation offices, and non-profit groups. BLM is authorized to convey lands identified for such uses to other units of government and to local

user groups. On occasion, such conveyances could be a device to mitigate adverse effects of nearby mineral development by providing access to recreational opportunities to the residents of communities, sanitary landfills, storage yards for local government equipment, airports, and similar uses.

Section 317

The most prominent section of FLPMA with regard to off-site mitigation is Section 317, which covers the distribution of mineral revenues. This section increased the distribution of mineral sales, bids, royalties, and rental monies from the Federal government to State governments to a level of 50% (Alaska's share was increased to 90%). FLPMA sanctions the use of these funds for planning, construction, and maintenance of public facilities, and provision of services in areas affected by Federal mineral development.

Decisions on distribution within States rest with State legislatures and this has been an item of dispute in several States. Local officials representing communities most affected by nearby development have asserted that they receive less funding than appropriate. However, according to FLPMA, this is entirely a State government function and the Federal government has not intervened into these affairs, internalized within the several States. FLPMA suggests a path of distribution and the matter is left to the discretion of State legislatures.

Section 317 also authorizes low-interest loans (3% annual interest) to States in which Federal mineral development occurs. However, there has not been any no appropriation tied to this authority since FLPMA's passage.

4. Mineral Leasing Act (MLA)

This legislation, passed in 1920, is actually titled "An Act to Promote the Mining of Coal, Phosphate, Oil, Oil Shale, Gas, and Sodium on the Public Domain" but is widely known as simply the Mineral Leasing Act (MLA) of 1920. It authorizes and establishes procedures for the Secretary of the Interior to lease deposits of oil and gas, coal, oil shale, and certain other minerals owned by the Federal government. In terms of both overall mineral and energy development in the western United States and BLM's opportunities to provide mitigative assistance to affected communities, it has been a very influential piece of legislation. There are two key sections of the MLA that effect BLM's mitigation environment.

Section 35

The more straightforward of these two sections is Section 35. This section established the return of 37-1/2% of the Federal bonuses, royalites, and rentals to the State in which the leasing or production occurred. MLA directed that these funds be used specifically for roads, schools, and other educational institutions ... but provided for State legislative discretion on the distribution of the funds.

Section 35 of MLA was amended in 1976 through FLPMA and several acts which directly focused on coal and oil shale leasing. These changes resulted in the States's share being increased to 50% (Alaska's share to 90%) of the available monies. Congress also freed the funds from strictly road and school maintenance and construction and indicated its intent that these

funds be expended in areas affected by Federal mineral leasing. Again, however, the State legislatures were provided discretion within the various States as to how and where the money is actually spent.

Section 30

The second section of MLA that carries significant mitigation authorization is Section 30. This section addresses lease stipulations, including diligent operation, safety requirements, workdays for underground miners, employment of minors, payment of wages, and other lease conditions. More pertinent, however, is the following: "Each lease shall contain provisions ... for the safeguarding of the public welfare: provided that none of such provisions shall be in conflict with the laws of the State in which the leased property is situated."

This "general welfare" clause in Section 30 is a very broad mandate to the Secretary. It has been asserted by some individuals (see George Pring article in Chapter X) that the general welfare language in Section 30 gives the Secretary more than adequate discretionary authority to attach stipulations to leases that focus on social and economic effects. Several factors, however, cloud this Section 30 interpretation:

- While the authority has been used to respond to socioeconomic issues within BLM, it has been used only in unique circumstances and for limited purposes (e.g., to ensure information exchange).

- The language of Section 30 neither expressly prohibits nor expressly mandates the use of such stipulations to address socioeconomic questions.

- There is no formal Solicitor's Office legal opinion on the question because BLM's infrequent use of such conditions has not been challenged in court.

Therefore, the use of Section 30 as general authority to attach socioeconomic stipulations is tentative. The language is very broad and thus does not give clear direction to BLM. See also Jack Little's response to George Pring's article in Chapter X.

In conclusion, Section 30 has been used by BLM to assist local units of government in dealing with mineral leasing-induced change, but its use has been limited to exceptional cases.

5. The Federal Coal Leasing Amendments Act (FCLAA)

This legislation was enacted into law in 1976 and is largely a series of amendments to the 1920 Mineral Leasing Act. Unlike the MLA, however, it focuses on a single leasable mineral, coal. It has a couple of key mitigation sections but only one of these is unique to this act.

Section 9

First, Section 9 of the FCLAA also changes the distribution of sales, bonuses, royalties, and rentals from a 37-1/2% States' share to 50%. The language is virtually the same as Section 317 of FLPMA, which covers a broader array of leasable minerals.

Section 3

The second key section, Section 3(3)(C), has the following language, which appears only in FCLAA:

> Prior to the issuance of any coal lease, the Secretary shall consider effects which mining of the proposed lease might have on an impacted community or area, including, but not limited to, impacts on the environment, an agricultural and other economic activities, and on public services.

There are several aspects of this requirement which deserve attention. First, it parallels more general NEPA requirements but is very explicit on socioeconomic effects. Perhaps Congress believed that some coal leasing actions would not qualify for NEPA attention and sought to insure coverage of this topic.

Second, and more problemmatic for interpretation, is the meaning of "consideration." There are two perspectives on the interpretation of this expression. One interpretation would require the acquisition of information and its use in deliberations on lease issuance. Another interpretation would require not only the acquisition of information but its use to remedy possible adverse consequences on nearby communities. To date, BLM has used the first interpretation, which duplicates routine NEPA-driven work.

Mitigation Activities in the Bureau of Land Management

Bureau socioeconomic mitigation activities have been especially prominent in Colorado. The Colorado experience is used here to illustrate how social and economic mitigation issues have been resolved in the BLM.

In the late 1970's and early 1980's, potential large scale coal and synthetic fuels (oil shale) development in several Western Slope counties of Colorado created an atmosphere in which local officials, with limited resources, faced immense population pressures on services and facilities. Since BLM controlled the leasing processes, these officials, with State government assistance, sought a measure of Federal sanctioning of their influencing this potential development and growth. As discussed in Chapter VII, Colorado counties rather than the State have central procedural roles in socioeconomic mitigation. State intervention in the process is relatively limited (compared to Wyoming, for example, with the Industrial Siting Administration). Thus, Colorado counties have a large measure of the action on siting questions. Without coverage provided by statewide siting legislation, county officials went directly to the Federal government for the screening of mitigation issues.

These ventures between local, State, and BLM officials took variable forms. For example, a land sale was negotiated with the city of Rangely, in Rio Blanco County, for community expansion purposes. Also, the BLM State Office, through a cooperative agreement, contributed funding to the State's Cumulative Impacts Task Force. The Task Force, consisting of both public and

private sector representatives, developed a common data base and standard analysis procedures for describing existing social and economic conditions and projecting changes over time. This group helped to resolve and avoid controversies between Federal, State and local offices and industry over analytical assumptions, procedures and findings. BLM also participated in the Joint Review Process, whereby several regulatory agencies agreed to consolidate their permitting activities. See Chapter VII, State Government Programs, for a more complete discussion of the Cumulative Impacts Task Force and the Joint Review Process.

Included as exhibits in this section are several additional major products of Colorado BLM's involvement in local socioeconomic mitigation as well as a summary of how mitigation issues were handled in the Piceance Basin RMP. These are exhibited because each represents a unique approach, based on different conditions and needs of local jurisdictions and may be useful to other BLM offices as examples.

1. Memorandum of Understanding: Rio Blanco County and BLM

This 1977 MOU (Exhibit 2) is an example of a socioeconomic mitigation mechanism. Through its use, a local jurisdiction is provided explicit opportunity to participate in and review BLM management processes. The agreement includes both specific and general commitments toward improved coordination and cooperation between County and BLM officials - focusing on planning, leasing and permitting activities.

EXHBIT 2

MEMORANDUM OF UNDERSTANDING
Between
Board of County Commissioners, Rio Blanco County, Colorado
and
State Director, Bureau of Land Management
U. S. Department of the Interior

This Memorandum of Understanding, made and entered into by and between the Board of County Commissioners, Rio Blanco County, Colorado, and the State Director, Bureau of Land Management, Colorado, acting pursuant to the Federal Land Policy and Management Act of 1976, National Environmental Policy Act of 1969, Title IV of the Intergovernmental Cooperation Act of 1968, and the Local Government Land Use Enabling Act of 1974, as codified at §29-20-105, C.R.S. 1973; §29-1-201 et seq., C.R.S. 1973; and §30-11-102(1)(d), C.R.S. 1973; and all amendatory acts thereof or supplemental thereto, and such other legislation and regulations as may apply, WITNESSETH, that:

WHEREAS, Rio Blanco County (hereafter referred to as the County) has adopted a County Master Plan, zoning, and other land use control regulations to guide development of all lands in the County, and

WHEREAS, Bureau of Land Management (hereafter referred to as BLM) has developed management framework plans to guide management and development of public lands, and

WHEREAS, Land use or development decisions by either party may become constraints on similar decisions by the other party, and

WHEREAS, Both the County and BLM desire to coordinate their respective planning and decision processes in order to achieve maximum benefits from available resources, to reduce duplication of effort and to attain better overall coordination of land management throughout Rio Blanco County,

NOW, THEREFORE, it is agreed that:

I. Each party will:

A. Cooperate in land use decision-making, including consultation in land use decisions and in preparation of land use plans, including, for example, County master plans and BLM management framework plans, including any amendment to or revision of said plans.

B. Inform each other as far in advance as possible of anticipated plans and proposed activities that might affect either party, but in no case shall such information be provided less than thirty-five (35) days prior to the adoption of such plans or taking place of such activities.

C. Cooperate in development and implementation of specific agreements supplemental to this agreement, including, but not limited to, agreements regarding zoning, subdivision of lands, road construction, maintenance and use, and rights-of-way.

II. The Bureau of Land Management will:

A. Solicit County participation in developing plans, programs, and proposals for management of public lands and consider those views in the decision process. Participation will specifically include analysis of preliminary recommendations (Step 1, MFP) and conflicts, development of recommendations (Step 2, MFP) for adoption of the management framework plan, and all rights to receive notice of and to participate in such planning as are provided by §202(F) of the Federal Land and Policy Management Act of 1976 and regulations adopted pursuant thereto.

B. Provide the County an opportunity to (1) review and comment on applications submitted to BLM that would affect land use or development in Rio Blanco County, and (2) to participate in development of the requisite environmental assessments (environmental statements and environmental analysis reports). Participation will specifically include analysis of land use impacts and analysis of alternatives. Those types of applications the County will review include, but are not limited to, those on Exhibit A, attached hereto.

C. Make available to the County all non-proprietary resource and land use information concerning land located in Rio

Blanco County in possession of BLM and all data from public land inventories maintained under §201(a), (b) of the Federal Land Policy Management Act of 1976 and all regulations adopted pursuant thereto.

D. Insert in all licenses, permits, leases and other such documents granting permission to occupy or use public lands a stipulation requiring all such licensees, permitees, and leasees to exercise the rights granted thereby in conformance to the following Rio Blanco County Ordinances and amendments thereto.

Chapter 100, Mobile Home Park Operations
Chapter 400, Subdivision Regulations
Chapter 500, Building Codes
Chapter 700, Solid Waste Disposal Regulations
Chapter 800, Individual Sewage Disposal Regulations
Chapter 900, County Road Vehicular Restrictions

E. Make personnel available to assist the County in complementary data-gathering and land use planning as is determined by the State Director to be practical within financial, legal, and personnel limitations.

F. To the extent consistent with the laws governing the administration of the public lands, coordinate the land use inventory, planning, and management activities of BLM lands with the land use planning and management programs of the County. In implementing this section, the BLM shall assure that consideration is given to County land use plans that are germane in the development of land use plans for BLM lands, assist in resolving inconsistency between land use plans of BLM and the County, and provide for meaningful public involvement of County officials in land use decisions for public lands, including early public notice of proposed decisions which may have significant impact on County lands.

G. Assure that land use plans for public lands are consistent with County plans to the maximum extent possible

under federal law and the purposes of the Federal Land Policy Management Act of 1976.

H. To the maximum extent possible, agree that no lease, grant, or other conveyance of public lands shall exempt such lessee, grantee, or other conveyee from compliance with County land use plans, laws, or regulations which are or may be in effect as of the date of the lease, grant, or other conveyance.

I. At least sixty (60) days prior to offering for sale or otherwise conveying public lands within the County, notify the Board of County Commissioners of such sale or conveyance in order to afford them an opportunity to zone or otherwise regulate, or change or amend existing zoning or other regulations concerning the use of lands prior to such conveyance. The BLM shall also promptly notify the Board of County Commissioners of the patent or other document of conveyance for such lands.

J. Cooperate with the County in the enforcement of the County regulations specified at §II.D. of this Memorandum of Understanding.

K. In the development and revision of BLM land use plans, provide for compliance with all state pollution laws and county regulations promulgated thereunder pursuant to state law regarding air, water, noise, or other pollution standards or implementation plans.

L. Cooperate with the County in mitigating the socio-economic impacts of land use activities on federal lands and with regard to federal mineral rights.

III. Rio Blanco County will:

A. Solicit BLM participation in developing master plans and zoning, or revisions thereto, for lands in Rio Blanco County. Participation will include review and comment on planning and zoning proposals and may include non-voting ex officio membership on the County Planning Commission.

B. Provide BLM an opportunity to review and comment on proposals submitted to the County (including the Planning Commission) that involve land use or zoning that may impact public lands. Those types of proposals BLM will review are included but not limited to those located on Exhibit B, attached hereto.

C. Make available to BLM social and economic information in possession of the County.

D. Make County expertise or personnel available for complementary data-gathering, environmental studies, and land use planning as is determined by the County to be practical, recognizing financial and personnel constraints.

E. Unless agreed to the contrary, the County shall not rezone any land described in §II.I. above, after the notification and before the sale therein described.

IV. Timeliness:

Both parties recognize that time is of the essence in performance under this agreement; in some cases it may be critical. Where necessary, reasonable time limits may be set for participation by either party.

V. Nothing in this agreement will be construed as limiting or affecting in any way the authority or legal responsibility of the Board of County Commissioners or the State Director, or as binding either County or the Bureau of Land Management to perform beyond the respective authority of each, or as requiring either party to assume or expend any sum in excess of appropriations available.

VI. Amendments or supplements to this agreement may be proposed by either party and shall become effective upon written approval of both parties.

VII. This agreement shall become effective as soon as signed by the parties hereto and shall continue in force unless formally terminated by either party after thirty (30) days' notice in writing to the other of the intention to do so.

VIII. Each and every provision of this Memorandum of Understanding is subject to the laws of the State of Colorado, Rio Blanco

County, and the laws of the United States, and the regulations of the Secretary of the Interior.

IN WITNESS THEREOF, the parties hereto have caused this document to be executed, the Board of County Commissioners, Rio Blanco County, and the State Director, Bureau of Land Management, Colorado, on this 5th day of July, 1977.

David Andrus — 7/5/77
State Director — Date
Bureau of Land Management

C. A. P. Brennan — 7-5-77 Date

K. O. Kenney — 7-5-77 Date

O. W. Fridley — 7-5-77 Date
The Board of County Commissioners — Date
Rio Blanco County, Colorado

EXHIBIT A

Rio Blanco County will be afforded an opportunity to review and comment on the following types of applications or proposals that may be filed with Bureau of Land Management, including, but not limited to:

1. Rights-of-way for roads, power lines, pipelines, telephone lines, and other rights-of-way projects.
2. Land use planning information (resource inventories, management framework plans, etc.).
3. Environmental assessments and statements.
4. Withdrawals and revocations.
5. Sale, exchange, lease or other conveyance of lands.

EXHIBIT B

The Bureau of Land Management will be afforded an opportunity to review and comment on the following types of applications or proposals that may be filed with Rio Blanco County:

1. Subdivision or mobile home parks within one mile of Public lands or that may impact Public Lands.
2. Roads, power lines, pipelines, telephone lines, and similar rights-of-way.
3. Dams, diversions, ditches, and similar water development or conveyance facilities.
4. Solid waste disposal sites and sewage treatment sites within one mile of Public Lands or that may impact Public Lands.
5. Sand and gravel permits.

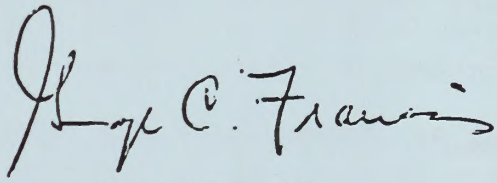
2. Stipulations: Prototype Oil Shale Leasing Program.

Socioeconomic lease stipulations (Exhibit 3) were incorporated into the Bureau's 1982 Environmental Impact Statement for the Prototype Oil Shale Leasing Program. The stipulations cover requirements for socioeconomic assessment reports and monitoring, and designation of a community liaison to be used by the lessee to work with affected jurisdictions. The Colorado State Office negotiated with local officials as well as State government officials in developing these stipulations. The approval process included involvement of and consideration by Washington office BLM and Department of the Interior officials.

EXHIBIT 3

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE PROTOTYPE OIL SHALE LEASING PROGRAM

Prepared by
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR



STATE DIRECTOR
COLORADO STATE OFFICE

Section 15. SOCIOECONOMICS AND OFF-SITE TRANSPORTATION

The lessee is required to consult with affected state and local governments in addressing social, economic and transportation impacts. The following is provided as a means to assist state and local government agencies in predicting, planning and mitigating these impacts.

(A) Socioeconomic and Transportation Report. The lessee shall prepare and submit a report to the Mining Supervisor together with the Detailed Development Plan required in Section 10 (a) of the lease. In preparing this report, the lessee may supplement site-specific data with data compiled by others. This report will consist of:

(1) A summary description of existing social and economic conditions, and existing off-site transportation systems and capacities;

(2) The estimated number of employees the specific lease operation will require during each phase of construction, mining and processing on the leased lands; the estimated multiplied population attendant to that employment; and where that population is anticipated to reside;

(3) Based on information acquired in consultation with state and local government, an analysis of the estimated effect of that population influx upon the county and community infrastructure;

(4) A statement of the immediate impacts and long-term effects of construction, mining and processing on the leased lands to tranportation facilities within the state;

(5) A statement of mitigation measures or opportunities which could be implemented to assist in dealing with these impacts; and

(6) A statement of the perceived roles and responsibilities of the lessee, the affected local governments, and the State of Colorado, relating to the technical and financial needs of the affected communities.

The lessee shall consult with affected local government agencies to determine the most appropriate elements to be included in the Socioeconomic and Transportation Report. In addition, the lessee will provide to the Mining Supervisor other available plans and projections that could be beneficial to planners in health, education, transportation, housing, recreation, and public and social services. The Lessee shall maintain records of information obtained and shall submit to the Mining Supervisor a status report of the socioeconomic and transportation conditions as part of the annual progress report required under Section 10(c) of the Lease. The Mining Supervisor shall make this data available to concerned government agencies.

(B) Community Affairs. The lessee shall designate an individual to work directly with the appropriate Federal, State and local authorities. This official will maintain communication with planning personnel in order to inform them of the Lessees' plans and activities, and assist in providing technical services for planning, as required. The Lessees' efforts shall be directed toward cooperation with and assistance to local and regional entities in alleviating socioeconomic and transportation impacts and assuring a well ordered community development process.

3. Socioeconomic Mitigation: Piceance Basin RMP

Socioeconomic mitigation became a major factor in land use planning for the Piceance Basin in the White River Resource Area in Colorado. One of the most controversial issues in the Piceance Basin Resource Management Plan (RMP) centered around the socioeconomic impacts resulting from potential oil shale development. Not only was the Piceance Basin RMP the first to apply the threshold concept to community growth (see discussion beginning on page IV-6), it generated a great deal of furor over a proposed community impact mitigation stipulation which ultimately led to a protest of the plan to the Director of BLM. The story, rather than the final outcome, illustrates many of the uncertainties and disagreements around the role and authority of the BLM to mitigate off-site socioeconomic impacts.

Given the sensitivity of the socioeconomic impact mitigation issue, the Piceance Basin planning team created a special work group composed of representatives of industry, environmental groups and State and local governments to help them in addressing the issue. There was a great deal of disagreement within that group and essentially no consensus was reached on the inclusion of a socioeconomic mitigation measure in the plan. As a result, the BLM released the Draft RMP/EIS in April of 1984 which included a committed social and economic mitigation stipulation with uncertain support.

From Page 215, Draft Piceance Basin RMP/EIS:

Committed Mitigation

In an effort to help predict and mitigate socioeconomic impacts resulting from oil shale development, BLM shall consult State and local governments prior to oil shale lease issuance. A

condition of the oil shale lease shall be that the lessee and the affected governments shall develop a mutually agreeable socioeconomic impact mitigation plan at the time of submission of the Detailed Development Plan. This lease stipulation shall be similar to Section 15 of the Environmental Stipulations of the Prototype Oil Shale Lease included in Appendix A in the Final Supplemental Environmental Impact Statement on the Prototype Oil Shale Leasing Program (USDI, BLM 1983c).

Additional social and economic impact mitigation measures that are recommended for implementation are identified under Uncommitted Mitigation at the end of this chapter.

Many reviewers of the Draft RMP/EIS objected to this committed mitigation measure in part because it provided no mechanism for ensuring that a mutual agreement could be reached and because of disagreements over the timing of the development of a mitigation plan. Upon reconsideration the Colorado State Director decided to revise this decision in the Proposed RMP and Final EIS. Essentially it was changed from a "required" to a "suggested" measure.

The change is described in the preface to the Proposed RMP/Final EIS:

The only significant difference between the Draft RMP/EIS and the Final RMP/EIS involves an oil shale lease stipulation to mitigate social and economic impacts. The Draft stated "A condition of the oil shale lease shall be that the lessee and the affected governments shall develop a mutually agreeable socioeconomic impact mitigation plan at the time of submis- sion of the Detailed Development Plan". This section of the Draft ("Committed Mitigation", p. 215) has been deleted from the document and an appropriate addition has been made on p. 236 of the Draft (see "Text Changes" section). Justification for removing this stipulation is described in detail in the "Response" section of this volume (Response #11).

The text addition read as follows:

The lessee and affected State and local governments are encouraged to cooperatively develop a satisfactory social and economic mitigation plan at the time of submission of the Detailed Development Plan.

In the "Response" section of the Final, the change was discussed at greater length:

> Social and Economic.....Communities and other State and local government entities often want BLM to help strengthen their hand in negotiating with energy lessees for mitigation of social and economic impacts. At the same time, however, these same entities do not wish for Federal "control" or "interference" in ther options for specific mitigations. It is not the policy of the Department of the Interior to interfere with the stipulations or negotiations occurring between local or State authorities and lessees, though it is policy to cooperate with them as fully as possible within the laws. Nor is authority given for local and State authorities to prevent leasing of Federal lands. We have identified and analyzed social and economic impacts in this document. Though no Federal laws expressly permit BLM to formulate and enforce social and economic impact mitigation, we encourage the formulation of a satisfactory impact mitigation plan cooperatively by the affected State and local governments and the lessee. To clarify this intent, the "Committed Mitigation" section on page 215 of the Draft has been deleted and an appropriate addition has been made on page 236 of the Draft....

Protests on the Proposed RMP/Final EIS were received from the Rio Blanco County Board of Commissioners and the Associated Governments of Northwest Colorado (AGNC). The AGNC generally supported the County's objections to the proposed mitigation measure and went on to suggest language for a stipulation which would require compliance with State and local laws (the so-called "Ventura stipulation"). The BLM Colorado State Office subsequently consulted with the Regional Solicitor. The Regional Solicitor's response as well as a 1983 Associate Solicitor memorandum referenced in that response are included as Exhibits in Chapter X. On the basis of the Regional Solicitor's advice, the Director proposed an alternative stipulation requiring the lessee to comply with State and local laws which do not impermissibly conflict with the achievement of a congressionally approved use of Federal lands. The Director's response is shown in its entirety as Exhibit 4.

The Piceance Basin experience illustrates rather vividly the unsettled controversy over the role and authority of the BLM in mitigating off-site socioeconomic impacts. Furthermore, it demonstrates the potential difficulties BLM managers may face in developing an appropriate and palatable mitigation measure and negotiating it through the practical political environment.

EXHBIT 4

1617.2(202)
PP-CO-PC-85-01

April 25, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Allan J. Jones
Chairman, Board of County Commissioners
Rio Blanco County Courthouse
Post Office Box 599
Meeker, Colorado 81641

Dear Mr. Jones:

Your protest to the proposed Piceance Basin Resource Management Plan (RMP) has been carefully reviewed. The purpose of this letter is to inform you of the results of our review and the decision on your protest.

Your letter specifically protested the deletion from the proposed RMP of a provision contained in the draft requiring future oil shale lessees and "the affected governments" to develop a mutually agreeable socioeconomic impact mitigation plan at the time the lessee submits its Detailed Development Plan to the Bureau of Land Management (BLM). As an alternative to the above provision, you suggested inclusion of a stipulation contained in your protest.

As proposed in the draft, the stipulation required State and local agreement that a lessee's proposed socioeconomic impact mitigation plan was adequate. Without that agreement, a lessee would have been unable to proceed with the development of the leased oil shale deposits. It is precisely this sort of "veto" power over a congressionally approved activity (i.e., the leasing and development of oil shale deposits) that the Courts concluded was prohibited in in Ventura County vs. Gulf Oil Company, [601 Fed 1080 (9th Cir. 1979), affirmed without opinion, 445 U.S. 947 (1980)]. Thus, the legal adequacy of the provision in the draft RMP is doubtful.

The ruling in the Ventura County decision, supra, and the Associate Solicitor's December 8, 1983 explanation of that ruling, both conclude that State and local governments cannot impose laws and regulations "impermissibly conflicting with achievement of a congressionally approved use of federal lands." Thus, the Associate Solicitor concluded that the stipulation then in use could be changed "to express more clearly our intention that state and local law is not applicable when it is used to prohibit lessee's activity necessary to acnieve the Departmental purpose in lease issuance." It is important to note, however, that the word "prohibit" does not mean that anything short of absolute prohibition is a legitimate exercise of State or local authority. The Ventura County decision, supra, rules out any State or local laws wnich impermissibly conflict with the achievement of a congressionally approved use, not simply those which absolutely prohibit such use.

Nonetheless, experience gained through the Department's Prototype Oil Shale Leasing Program indicates there is some merit in the argument that the time for submitting a Detailed Development Plan may not necessarily be the time for submitting a socioeconomic impact mitigation plan. To satisfy this concern, a stipulation providing for the submission of an "encouraged" and "cooperatively developed" mitigation plan at a mutually agreeable time (or times) could be inserted in the lease at lease issuance.

To avoid confusion in the future, and to clearly reflect the ruling of the Ventura County decision, supra, the Record of Decision on the Piceance Basin RMP and associated Final Environmental Impact Statement will incorporate into the plan a stipulation which reads as follows:

> The lessee shall comply with all state and local laws governing any class of activity undertaken on the lease in the exercise of lease rights, including permits and license laws, except that such laws apply only to the extent they do not impermissibly conflict with the achievement of a congressionally approved use of Federal lands.

We believe the above wording addresses the concern raised in your letter. Thank you for your participation and comments. This is the final decision of the Department of the Interior on your protest.

Sincerely,

Neil Morck
Deputy Director

cc: Honorable Richard Lamm
Governor of Colorado

Other Federal Agencies

Chapter V

Mitigation Activities of Other Federal Resource Management Agencies

Overview of Chapter

This section portrays the mitigation authorities and activities of several other Federal agencies. They were selected because Bureau personnel will, on occasion, be working with representatives of these agencies on mitigation issues. It will thus be helpful to Bureau representatives to have at least some background on the workings, or absence of workings, of these agencies on off-site social and economic mitigation.

The following agencies are covered:

- Forest Service
- Bureau of Reclamation
- Office of Surface Mining
- Federal Energy Regulatory Commission

The Forest Service

The Forest Service is quite conservative in its off-site mitigation activities. This is clearly evident in the Rocky Mountain Region, where ski resort and minerals permitting has elevated mitigation issues. However, it is also the case as well throughout the rest of the National Forest system, where there are few dramatic proposals that would result in wholesale community changes.

There is no mention of mitigation in the Forest Service's Guidelines for Economic and Social Analysis of Programs, Resource Plans, and Projects (FSM 1973) (Federal Register, Volume 47, No. 80, April 26, 1982, 17940-17954). Part of the followup operational handbook, Chapter 30, Social Analysis (FSH 1909.17) includes mitigation in its definition section but only through citation of CEQ regulations. A mention of effective mitigation is also included in the discussion of social criteria for evaluating alternatives.

Given the difficulty of attaching mitigation measures to proposals and alternatives in its land use plans, this position is understandable. However, in its special use permitting of minerals facilities or large-scale recreational developments, the Forest Service assumes little responsibility for off-site impacts and has deliberately chosen not to attempt an extension of its well-established on-site authorities.

A couple of fairly recent examples from the Rocky Mountain Region will illustrate these comments on permits. The Forest Service prepared a fairly elaborate environmental analysis report on the Beaver Creek winter sports site in Eagle County, Colorado. Its social and economic sections covered the economic base and employment, population density and housing, social structure and social issues, schools, water supply, sewage, solid waste, energy, fire and police protection, road maintenance, and transportation and parking.

Then, for each of these topics, there was discussion of background, favorable effects, adverse effects, mitigation, standards, regulation and enforcement, and unavoidable adverse effects. Throughout the mitigation discussions, the only Forest Service measure brought up centered on a non-discrimination in employment clause in the special use permit to be issued to the proponent. Numerous Vail Associates proposals, recommendations, commitments, and plans were presented but no unique Forest Service suggestions or requirements were forwarded.

The Mount Emmons Mining Project Environmental Impact Statement is similar in its treatment of off-site issues. As in the Beaver Creek document, the proponent's (in this case AMAX) proposals and commitments are openly and thoroughly presented. Indeed, the Mount Emmons EIS contains a separate section entitled AMAX's Mitigation, Avoidance, and Enhancement Measures. It is a thorough report with extensive and well-considered proposals. It deserves recognition for its thoughtfulness and for its implicit statement on corporate posture.

The Forest Service's Mount Emmons mitigation section also includes a socioeconomic subsection but none of the items are portrayed as being subject to Forest Service requirements. This section is prefaced by the following statement:

"This Appendix contains reasonable mitigation measures that apply to Alternatives 3-7. These mitigation measures have been consolidated from the following sources: Forest Service, BMML (1981 a-d) and AMAX (1981a). The mitigation measures that the Forest Service may require to mitigate impacts that occur on NFS lands are identified by an asterisk (*) and are assumed to be in place for the impact analyses described in Chapter 4. It must be clearly understood that NEPA does not require mitigation measures be implemented by the proponent or anyone else. Likewise, it must be understood that the task of the Forest Service required by NEPA is to disclose impacts and consequences of the proposed action and alternatives to that action. In doing so, the following must be recognized:

(1) Any mitigation required by the Forest Service will relate only to impacts on NFS lands and must be based on legal authorities of the Forest Service.

(2) The disclosure of impacts and the discussion of mitigation methods is for the purpose of providing those agencies of Government (Federal, State, and local) with decision authority regarding the Project, information they may use in approving or denying within their authority. Such information is also provided so that the proponent and the public at large is aware of at least part of the information being used by the various agencies in making their decisions.

(3) When determining what mitigation measures will be required on NFS lands, Forest Service officials must consider: authorities under existing law, regulation, and policy; economic feasibility; land management objectives; and the impacts and consequences disclosed in the EIS. Forest Service required mitigation must be in accord with the Forest Service authorities which apply to the activity under consideration. The Record of Decision will identify, by inclusion or specific reference, the mitigation measures and necessary monitoring programs. The required Forest Service mitigation measures will become terms and conditions of any permit or authorization.

(4) Forest Service officials will sit at the negotiating table, if requested, to assist other levels of government, as well as the proponent, in interpreting the EIS information and to provide technical assistance relative to the Forest Service area of professional expertise. The role of the Forest Service should not be considered as 'mitigation facilitator'."

The rationale for these statements lies in the lack of explicit authority for off-site mitigation in the National Forest Management Act, the

Multiple Use-Sustained Yield Act, the Forest and Rangeland Renewable Resources Planning Act, and other legislative mandates that guide Forest Service assessment and management. Without specific legislative sanction, the Forest Service is reluctant to require such measures as a matter of policy. It can only suggest.

Further clarification is provided by a Forest Service document produced in the Northern Region, entitled Minerals, People, and Dollars. This report, focusing on Forest Service minerals activities, covers mitigation from Forest Service, industry, and community perspectives. Its discussion of Forest Service options opens with a statement that procedures to control social and economic effects in communities - comparable to on-site physical and biological resources - have not been developed in the agency. It then suggests several potential mechanisms that Forest Service managers can employ to accomplish the desired ends. Included are informing the public of potential actions, assessment of effects, cooperating with other entities, and building within-agency awareness of off-site consequences.

These actions, falling well short of requiring proponents to address effects, generally fall into the suggested type of measure. This is consistent with the lack of congressional mandate provided the Forest Service in its guiding legislation on non-timber programs.

In its timber management program, however, the Forest Service is clearly able to alter sales schedules to consider and avoid "substantial adverse impacts upon a community in the economic area in which the forest is located" (36 CFR 219.16 (a)(3)(iii)). This means that timber sales can be locally

accelerated beyond the rate of sustained yield in order to protect local economies dependent upon timber harvesting. As such, this could be an effective discretionary mitigation action to avoid adverse socio-economic effects of local forest management.

Bureau of Reclamation

The Bureau of Reclamation mainly seeks to mitigate adverse consequences of its construction projects through scheduling and design changes. Given the nature of many Bureau water control projects, however, it is inevitable that some persons are displaced by the flooding of previously occupied land. In these cases, the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646) become effective. This law established a system (moving expenses, replacement housing, etc.) for assisting persons, families, and firms whose property is taken by Federal projects. The Corps of Engineers and other Department of Defense agencies also employ this legislation when dislocation results from their program implementation.

More affirmatively, there has been successful Bureau of Reclamation experience with changing design alternatives in a major water development project in order to minimize adverse local socioeconomic effects. The following paper (Exhibit 5) by Curt Brown captures the process that the Bureau of Reclamation used on a very controversial and visible project in Arizona which had profound implications for residents of the area. The case is an illustration of changing design of project alternatives, rather than responding to adverse effects, as a mitigation mechanism.

EXHIBIT 5

WATER RESOURCES BULLETIN
VOL. 20, NO. 3 AMERICAN WATER RESOURCES ASSOCIATION JUNE 1984

THE CENTRAL ARIZONA WATER CONTROL STUDY: A CASE FOR MULTIOBJECTIVE PLANNING AND PUBLIC INVOLVEMENT[1]

Curtis A. Brown[2]

ABSTRACT: This paper describes the successful application of a multiobjective planning framework, incorporating substantial public involvement, to a major water resources decision involving intense conflicts. The study was initiated to help resolve more than a decade of controversy over a project proposed to control flooding and provide regulatory storage in the Phoenix, Arizona, area. The public was actively involved in the development of study goals and the specification of acceptable tradeoffs between multiple objectives. A wide range of structural and nonstructural alternatives was formulated and evaluated in relation to these objectives, and broad-based support was developed for a new plan. Reasons for the successful outcome are discussed, as well as implications for water resources planning under the new Federal Principles and Guidelines.
(KEY TERMS: multiobjective planning; public involvement; conflict resolution; water resources; Arizona.)

This paper describes and evaluates the application of a multiobjective planning framework, incorporating substantial public involvement, to a major water resources development decision involving considerable conflict. The study helped to resolve more than a decade of controversy and bitter attacks and facilitated the development of broad support for a new plan. This study demonstrates the importance of a multiobjective approach to planning at a time when multiobjective planning is being de-emphasized in the Federal guidelines for water resources planning in favor of a greater emphasis on maximization of economic benefits. The study described is the Central Arizona Water Control Study (CAWCS), funded to examine water storage and flood control alternatives in the Phoenix, Arizona, metropolitan area.

STUDY SETTING

Historically, Phoenix has been subjected to flooding on the Salt River which flows through the center of the metropolitan area. In addition to structures for flood control, the State of Arizona has long sought additional reservoir storage for irrigation in the Phoenix area. These reservoirs, termed regulatory storage reservoirs, would hold water pumped from the Granite Reef Aqueduct during periods of low demand and release this water during the summer months. In 1976, the Bureau of Reclamation (Bureau) published an Environmental Impact Statement (EIS) proposing the construction of a flood control and regulatory storage structure, called Orme Dam, at the confluence of the Salt and Verde Rivers a few miles upstream from Phoenix (Bureau of Reclamation, 1976).

For the 1976 EIS a number of alternative sites had been evaluated using the criteria of (1) storage capacity, (2) flood control, (3) recreation, (4) fish and wildlife benefits, and (5) power generation. The Orme site was recommended as the best of two possible alternatives that provided full flood control and storage benefits with a single structure.

Publication of the EIS and recommendation of the construction of Orme Dam brought strong public reaction. While Orme Dam would provide flood control and storage for irrigation, it would also require relocation of virtually the entire Yavapai Indian Tribe residing along the Verde River in the Fort McDowell Indian Reservation and inundation of streamside wildlife habitat that supports bald eagle nesting activities. The controversy and opposition to the proposed project were significant enough to halt the planning process. In April 1977, Orme Dam was 1 of 19 water projects halted by President Carter's "hit list."

Support for Orme Dam might have waned at this point if not for three major floods in 1978 and 1979 that caused approximately $200,000,000 in damages in the Phoenix area and the loss of seven lives. After the 1978 floods, pro-Orme groups blamed the Indians and environmentalists for the flood damages they felt could have been prevented by Orme Dam, and the opponents of the dam blamed the State and operators of the existing dams for "outmoded water policies" that prevented safe storage of the floodflows (Arizona Republic, 1978a, d, e; Arizona Daily Star, 1978; Scottsdale Daily Progress, 1978; State Press-ASU, 1978).

Public demands for a solution grew and political representatives pushed for reinstatement of Orme as part of the Central Arizona Project (Arizona Republic, 1978b, c; Central Phoenix Sun, 1978). In response to these requests, a special planning study was initiated by the Bureau to study alternative solutions

[1] Paper No. 84040 of the *Water Resources Bulletin*.
[2] Psychologist, Division of Planning Technical Services, Bureau of Reclamation, P.O. Box 25007, Denver Federal Center, Denver, Colorado 80225.

to the problem, including Orme Dam. The study, called the Central Arizona Water Control Study, began in July 1978.

THE CENTRAL ARIZONA WATER CONTROL STUDY

The goal of the study was to find a plan that could address the various issues, including flood control, water storage, environmental concerns, and social concerns, and be acceptable to the many parties involved. The social context for the study presented many difficulties. The various interest groups were strongly polarized. At the start of the study, most local and state politicians strongly supported the Orme alternative, which had previously been halted because of the public controversy it generated. In addition, the recent floods put considerable pressure on the study team to develop a solution quickly.

To succeed, the study had to develop public support and trust, examine all reasonable alternatives, and yet not unduly delay selection of a plan. The general structure of the study was similar in many respects to the "iterative open planning process" (IOPP) proposed by Ortolano (1974). The IOPP is composed of four planning stages – problem identification, plan formulation, impact assessment, and evaluation – with continuous iteraction between planners and the affected publics at each stage. The CAWCS design emphasized:

1. *Multiobjective Plan Formulation and Evaluation.* The previous study, which had recommended Orme Dam, had employed multiple criteria to evaluate a number of plans that had been formulated primarily to address two objectives: flood control and regulatory storage. CAWCS was designed to use a broader set of objectives, including environmental and social objectives, to *formulate* plans, not just to evaluate plans. Emphasis was also placed on examining combinations of sites, not just single-structure alternatives.

2. *An Open Planning Process.* While the previous study had obtained study review from a wide array of agencies and groups, public participation in the actual planning process was limited. The CAWCS study placed considerable emphasis on involving the public in all phases of the study process – from the generation to the evaluation of alternative plans. In addition, an independent consulting firm was hired to perform many of the sensitive environmental and social impact assessment studies and coordinate the public involvement program.

PUBLIC INVOLVEMENT

Public involvement is a systematic process that informs the public about decisions that may affect their lives and provides opportunities for the public to participate in the decision-making process. Public involvement was a major aspect of the study, employing a wide range of activities. Many of the public meetings and workshops are discussed in the following description of the study. In addition to these activities, the public involvement program employed:

1. *A Governor's Advisory Committee.* Governor Babbitt appointed a 28-member committee, representing all major interest groups, to provide study guidance. Interests represented included municipalities, the business community, water development concerns, the League of Women Voters, environmental groups, Indian representatives, and public utilities. The committee, which met 19 times from June 1979 to October 1981, received numerous briefings on the study, provided comments, and served as a vehicle for obtaining public and political support for study findings.

2. *The Technical Agency Group (TAG).* This group was established as an advisory committee for technical aspects of the study, representing approximately 50 groups and agencies. The group met 24 times between January 1979 and September 1981. The TAG facilitated discussion and resolution of technical problems as the study progressed. Comments made during the evaluation of the TAG process indicated that participants felt the TAG was unwieldy due to its size but necessary to resolve technical issues before facing the public. They felt that the TAG helped build credibility for technical aspects of the study and that it permitted review of the technical analyses without having to wait for the EIS (Bureau of Reclamation, 1982).

3. *A Mailing List.* The mailing list of interest groups and individuals was continually updated and contained 4,386 entries by the end of the study.

4. *Newsletters.* Twenty-three newsletters were sent to the mailing list between January 1979 and November 1981. This was one of the most important and effective means for keeping the public appraised of study progress and upcoming activities, and public response to the newsletters was very favorable.

5. *Factbooks.* Four detailed factbooks were prepared for the public at key points in the study in order to provide information upon which to make a judgment or provide comments. While the newsletters provided general information and summaries of study findings, the factbooks carried the main burden of providing the public with technical detail and explanation. The final factbook was 150 pages and was accompanied by a 40-page summary. Providing these data throughout the study not only enhanced the quality of public input but also reduced the chances for the sort of unpleasant surprises and subsequent attacks which can occur when the public does not receive this information until publication of a draft EIS.

6. *Briefings.* Between July 1979 and November 1981, 26 briefings were held for elected officials and the media, including local city mayors, the Yavapai Tribal Council, the Governor, the State legislature, and the congressional delegation.

7. *Public Presentations.* Over 150 presentations were given to civic groups, Government agencies, professional organizations, and other interested publics during the course of the study (Bureau of Reclamation, 1982).

DEFINING ROLES OF STUDY PARTICIPANTS

The study process was designed to perform two parallel functions: fact identification and value identification. The goal of value identification was to identify the social objectives that the plans would address and to use that information in

both the formulation and evaluation of plans. The primary source of value information was the public, through public involvement activities.

The goal of fact identification was to assess the technical feasibility of proposed plans and to determine their impact on the objectives. Technical facts were identified through studies performed by the Bureau of Reclamation, the Army Corps of Engineers, the U.S. Fish and Wildlife Service, and private consultants.

While planners should strive not to confuse judgments of fact with statements of value, the distinction between facts and values is blurred at the boundary. For example, while the public can specify that a riverine ecosystem is highly valued, technical specialists must make judgments about the best way to measure impacts to the ecosystem. Those judgments, such as which components of the ecosystem to measure, are not entirely value free. To maintain study credibility, such "boundary" judgments and assumptions must be well documented and subject to early public review (see, for example, Stewart, *et al.*, in press).

Also, planners must keep in mind that people have relatively few basic values (Rokeach, 1973) and cannot immediately apply these values to specific, often complex, alternatives. In order to reach a value judgment about a proposed action, individuals must be helped to understand how that action affects their own needs and goals. This requires both information about the action and time to consider its relationship to more basic values. If the public is rushed into making value statements about specific alternatives without sufficient time or information, unstable, unreliable responses may result which may misdirect the planning process (see Fischhoff, *et al.*, 1979). Therefore, time and information are two key components of any public involvement process.

STRATEGY FOR EVALUATION OF ALTERNATIVES

Most planning studies are a compromise between exhaustive analysis and practicality. While fully "rational" planning requires generation and evaluation of all potential alternatives, most studies must adopt economizing strategies to reduce the burden of data collection and evaluation. The CAWCS adopted the strategy of screening out poor alternatives as early as possible, subjecting only the most promising alternatives to full multiattribute analysis. The general design for CAWCS was:

1. Define study goals and generate potential plan elements (individual actions or structures) that might each partially meet the goals.
2. Screen out plan elements having unacceptable characteristics with respect to a set of critical factors (e.g., unsuitable damsite geology).
3. Combine remaining elements into 10 to 20 systems, or groups of elements that work together to address all goals.
4. Perform preliminary evaluation of systems on all objectives. Screen out poor performers.
5. Perform detailed multiattribute evaluation on remaining set of alternative systems.

This type of approach focuses the major effort on the most promising alternatives. As with all economizing strategies, it does carry some risk of desirable alternatives being screened out because they perform poorly on one "critical" factor. To guard against this possibility it is important that options are screened out only for "fatal flaws" – negative impacts that cannot be offset by any reasonable degree of benefits on other factors.

DESCRIPTION OF THE STUDY

Stage I – June 1978

The goals of Stage I were to identify study objectives and potential actions that could achieve these objectives. Preliminary objectives identified by previous studies, the public, and interested agencies were:

1. Water supply
2. Flood control
3. Energy conservation and production
4. Water quality
5. Vegetation and wildlife
6. Recreation
7. Social considerations
8. Cultural resources
9. Preservation of water rights
10. Safety of dams

Three public meetings were held during Stage I to inform the public about the study process and to solicit their suggestions for study objectives and potential alternatives. A number of alternatives were suggested by the public and analyzed by the technical staff, including specific damsites, nonstructural alternatives for flood control, use of floodflows to recharge groundwater supplies, and changes in the operation of existing dams to provide additional flood storage. In all, over 30 structural (e.g., dams, levees) and nonstructural (e.g., floodplain management) elements were identified during Stage I. Fourteen of these elements were screened out as unfeasible on the basis of technical problems (e.g., geologic problems at the proposed damsite prevented a safe structure), or prohibitive cost, or ineffectiveness in meeting the objectives (Bureau of Reclamation, 1980).

Stage II – March 1980

Plan elements passing the screening were carried into Stage II where they were evaluated in more detail to determine their technical feasibility, cost, and environmental and social effects. Nine public workshops were held during this stage to report the results of the Stage I screening of individual plan elements and to obtain the publics' suggestions for additional alternatives or additional factors that should be used to evaluate alternatives. Workshop participants generally agreed that all major alternatives had been identified, and helped to define the most critical aspects for the study objectives (for example, that transportation disruption was the most significant impact of flooding).

To this stage the study had examined only separate plan elements; that is, individual actions or structures that were sometimes redundant in purpose with other elements being evaluated. The next screening of alternatives was aimed at selecting the best element from each group of elements performing the same function, such as the best of the elements providing flood control on the Verde River, the best of the regulatory storage elements for the Agua Fria River, the best nonstructural flood control plan, and so on. Each set of elements was evaluated on the relevant subset of study objectives and the best performing element selected. Ten "best" elements remained, including eight structural and two nonstructural elements. Since no single element could achieve all of the study objectives, elements were next combined into 15 systems, each system composed of a set of elements that worked well together. For example, one system called for constructing a new dam on the Verde River and enlarging two existing dams on the Salt River. These structures, together with downstream flood plain management, would provide flood control, regulatory storage for the aqueduct, hydropower, and limited additional recreation facilities. At the close of Stage II, four public forums were held to present the alternative systems and obtain comments and questions from the public (Bureau of Reclamation, 1981a).

Stage III – January 1981

At the start of Stage III, more detailed evaluations of each system were performed. Some systems were eliminated because a constituent element had been found on further analysis to be prohibitively expensive. The remaining systems were rated on the basis of their performance on the study objectives, and clearly inferior systems were eliminated, i.e., plans were eliminated if they performed more poorly than other plans on most, if not all, objectives. This left eight "candidate" plans that all performed well on many objectives and represented the range of possible kinds of actions. As is standard practice, this group included a "no action" alternative.

Advanced technical studies for these eight plans were done in hydrology, sizing and operations of structures, design and cost estimation, economics, financial (cost repayment) analysis, recreation, environmental impacts, and social impacts. A detailed Factbook was prepared for public distribution comparing the impacts of each plan on the study objectives. Over 75 specific characteristics of the plans were assessed, ranging from the level of flood protection provided at the Phoenix Municipal Airport and the number of bridges that would remain in service during a flood, to the number of families relocated from the reservoir sites and the number of bald eagle nesting sites inundated (Bureau of Reclamation, 1981a).

Of the remaining alternatives, no plan was clearly outperformed by a better plan, because each plan performed very well on some objectives. In order to choose among plans that have different benefits and costs on multiple objectives, it is necessary to specify the relative importance of the various objectives. Without this information, plan selection cannot proceed.

To obtain information on the relative importance of the study objectives, public participation in a "public values assessment" (PVA) was solicited in August 1981. Representatives from 60 public groups and organizations participated in the process (Bureau of Reclamation, 1981b). The set of plan characteristics was first reduced to a set of 14 major factors that were both important to the public and differentiated between plans (Table 1). Representatives then assigned "importance weights" to the factors to reflect their own values (i.e., which factor did they consider most important, second in importance, etc.). The group representatives were divided into seven clusters sharing similar views, and a values profile was developed and approved by each cluster. These seven profiles were then used to evaluate the performance of the eight plans as measured on the 14 factors. This produced ratings of the eight plans for each of the seven clusters as shown in Figure 1. This type of public values analysis has been used successfully to aid decisionmakers in other public policy conflicts (Dennis, *et al.*, 1983; Rorbaugh and Wehr, 1978; Hammond and Adelman, 1976; Gardiner and Edwards, 1975).

TABLE 1. Plan Evaluation Factors for the Public Values Assessment.

Water Quality	Non-Indian Relocations
Stream Habitat	Flood Control
Lake Habitat	Stream Recreation
Threatened and Endangered Species	Lake Recreation
Prehistoric Cultural Resources	Net Economic Benefits
Historic Sites	Total Cost
Indian Relocations	Regulatory Storage

The results of the analysis were striking (Figure 1). First, none of the plans involving Orme Dam (plans 3, 4, and 5) was rated high by any of the value policies, not even by the cluster of groups representing water development concerns or by the two clusters most concerned with flood control. This indicated that, in spite of longstanding public promotion of Orme Dam by these groups, other alternatives were available that fit more closely with their value positions. The poor performance of the Orme Dam alternatives was due to two things: (1) Orme performed poorly on factors that many groups considered very important (environmental and social impacts and cost) and (2) other plans were available that performed nearly as well as Orme Dam on the other critical factors (flood control, regulatory storage).

It appeared that, at the very least, Orme Dam could be eliminated as a viable alternative based on this analysis. This was a remarkable finding considering the continuing strong support expressed for Orme Dam by some public groups and the great majority of local and State politicians, including the congressional delegation (Arizona Republic, 1981a; The Times, 1981).

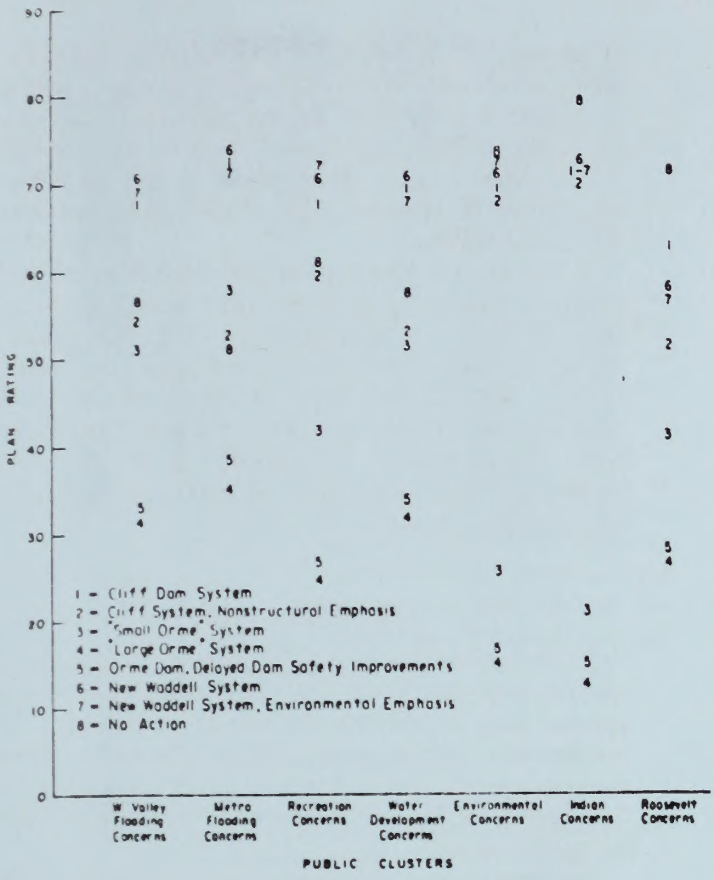


Figure 1. Plan Ratings for Each Public Cluster.

Further analysis suggested that Plan 6 might be a viable compromise plan; four of the seven value policies ranked it first, and it was highly ranked for the remaining three. This plan avoided the major environmental and social impacts associated with the confluence (Orme) damsite, the impacts that had created opposition to the original Orme proposal. Regulatory storage would be provided by an enlarged reservoir (New Waddell) on the Agua Fria River, west of Phoenix, and flood control would be provided by one new, one enlarged, and one rebuilt dam on the Salt and Verde Rivers. The results of the public values assessment were presented to the PVA participants in a followup meeting in September 1981 and in a newsletter to all study participants.

On October 2, 1981, the Governor's Advisory Committee voted 19 to 1 to recommend Plan 6 to the Governor (Phoenix Gazette, 1981). On November 12, 1981, the Secretary of the Interior confirmed Plan 6 as the Bureau's recommended plan, stating, "The logic for the selection of Plan 6 as the proposed action is the strong local support, the functional ability to meet statutory obligations required by the authorizing legislation and the fact that impacts on the Fort McDowell Indian Tribe are avoided" (Department of the Interior, 1981).

In a short span, many public groups and politicians, longtime supporters of Orme Dam, chose to support Plan 6 (known as the Waddell Plan) (Scottsdale Daily Progress, 1981; Arizona Republic, 1981b). Said Senator Barry Goldwater, "I don't know why someone didn't dream up the Waddell Dam a long time ago" (New York Times, 1981). And Congressman Morris Udall reflected, "The Orme Dam was a critically important issue to Arizona . . . But we finally ended up, to my utter amazement, with the whole Arizona establishment agreeing we really didn't want the dam" (Gendlin, 1982).

AFTERNOTE

Following the selection of a preferred alternative by the Secretary, an EIS was prepared and formal EIS hearings held in June 1983. Some conservation groups continue to oppose Cliff Dam, one of the flood control components of Plan 6. However, there appears to be continuing, broad support for Plan 6 as a whole. Perhaps the most enduring result of the study is the virtually unanimous agreement that an Orme Dam alternative is not needed, that a better alternative exists. It is this shift in opinion that probably contributed most to the reduction in conflict.

DISCUSSION

What made CAWCS work? It cannot be argued that just any type of study would have succeeded – a previous study had produced only conflict. The combination of the previous study, followed by CAWCS, approximated a naturalistic experiment testing the efficacy of planning methods used in CAWCS but not the earlier study, primarily the increased emphasis on public involvement and multiobjective planning. It is unusual in the policy sciences to have such a test of basic planning principles. One seldom gets to make a major decision twice, using different methods, and observe the outcome.

A summary of factors that appear to have promoted success include:

1. *Motivation to Seek a Solution.* Because of the longstanding concern for flood control and the recent flooding events, almost every party to the decision was motivated to find a solution. A major difficulty for CAWCS was to keep this motivation from precipitating a rush to select an alternative prematurely.

2. *Public Involvement.* The public involvement program was largely successful in achieving the goals of public information and participation, as delineated by Kauffman and Shorett (1977), and Schierow and Chesters (1983). For example, of those responding to a post-CAWCS evaluation, 84 percent felt their views had been considered in the study decisions (Bureau of Reclamation, 1982). Broad-based public involvement gave the public a feeling of commitment to the study process and its results. By using public values in plan formulation and selection, the study increased the likelihood of citizen support for the study recommendations, even when such recommendations were not exactly to an individual group's liking.

3. *Multiobjective Planning.* CAWCS emphasized the importance of multiobjective planning characterized by multiobjective plan *formulation*, not just evaluation. The earlier study had formulated plans primarily on the basis of two objectives and later evaluated them on five criteria. CAWCS both formulated and evaluated plans on a much larger set of objectives that had been selected to reflect public concerns. It is notable that the final decision hinged on social impacts, a factor that had not been included as an objective in the previous study.

The interaction between the setting of objectives and the generation of alternatives is illustrated by the case of the New Waddell damsite. The previous study, which recommended Orme Dam, formulated plans on the basis of flood control and regulatory storage. At that time the Waddell site was rejected on the basis of a preliminary engineering judgment that the site geology was not suitable (Bureau of Reclamation, 1976, p. 322). However, since one of the objectives of CAWCS was to minimize adverse social impacts, the Waddell site was reexamined because it avoided those negative impacts. On reexamination, a suitable placement of the New Waddell Dam was found nearby.

The multiobjective framework thus led to the development of a superior alternative for two reasons. First, by broadening the set of objectives it forced the analysis of a broader set of alternatives to meet those objectives. The alternatives also became more complex, since no single structure could meet all of the study goals. Second, the identification of additional objectives forced reconsideration of previously unacceptable tradeoffs. Alternatives previously rejected, based on a few factors, now performed well, based on the full set of objectives. A multiobjective approach does not guarantee that a good plan can be found, but it improves the odds of finding such a plan, if it exists.

While accepting the Waddell Plan represented a compromise on the part of some groups, the Plan addresses virtually all major concerns. This underscores the fact that formulation of good alternatives is fundamental to production of compromise or consensus. Public involvement is necessary to develop support for even the best alternative, but it cannot "sell" a poor plan.

4. *Sufficient Resources Committed.* CAWCS was a large study, among the largest conducted by the Bureau. While only a dozen Bureau people comprised the core planning staff, hundreds of Bureau, Army Corps of Engineers, and contract staff were involved in aspects of the study. The amount of resources committed to social and environmental impact assessment and to public involvement was larger than for most studies because of the significance of these issues. Such a study requires staff, time, and money, and when time is short, more money. For example, in CAWCS the tight schedule for getting information to the public often required rush printing of documents, which doubled printing costs.

5. *Involvement of Key Decisionmakers.* The survival of any recommendation depends upon the support of key decisionmakers. Considerable effort was made in CAWCS to maintain the involvement and support of important officials and decisionmakers. As noted, the GAC was important for maintaining involvement of not only the Governor but a wide range of influentials in the State. Regular briefings of local and State politicians and the Congressional delegation kept these individuals apprised of study developments so that they were not surprised by the release of study results that might contradict their public positions.

6. *Patience and Flexibility of Decisionmakers.* In the face of strong pressure to adopt the Orme Dam solution to the frequent floods, key decisionmakers within the Bureau and without, allowed the study to proceed in an open, deliberate fashion. While CAWCS may have been a case of "speaking truth to power" (Wildavsky, 1979), it was also an example of decisionmakers showing the flexibility to change long held personal and public positions in response to changing information and public attitudes.

THE COST OF CAWCS

Study costs for the June 1978 to March 1983 period were approximately $14,000,000 and public involvement costs were approximately $1,000,000. The cost for constructing Plan 6 is estimated at approximately $1 billion. This makes the study costs and public involvement costs roughly 1.4 percent and 0.01 percent of the construction cost, respectively. Was this money well spent?

In answering such questions, one can only try to estimate the economic efficiency of study expenditures in achieving study goals. How much is it worth to achieve resolution of a problem? Will a proposed study achieve resolution? While it is impossible to precisely estimate the benefit/cost ratio for a planning study, these types of questions should be asked when designing or evaluating any program. For CAWCS, the benefits of resolution, or of avoiding each additional year of delay, might be considered roughly equivalent to the annual Plan 6 net benefits, presently estimated at $20,000,000 (Bureau of Reclamation, 1981a). It is harder to estimate the likelihood of further delays and possible litigation if less money and effort had been spent. The only point of comparison is the earlier study which resulted in a delay of at least five years.

IMPLICATIONS FOR FEDERAL WATER RESOURCES PLANNING

On February 3, 1983, the President signed the new Principles and Guidelines for Federal Water and Land Resources Planning (P&G) (U.S. Water Resources Council, 1983). Among the many changes made from previous Federal guidelines, the P&G restructured the set of objectives for water resources planning. The previous guidelines (U.S. Water Resources Council, 1973) specified two co-equal objectives: national economic development and environmental quality. Plans were formulated to meet these objectives and were then evaluated on those two criteria plus regional economic development and contribution to social well-being. The P&G now emphasize a single planning objective, instructing that "the Federal

objective of water and related land resources project planning is to contribute to national economic development consistent with protecting the Nation's environment" (Section IIa), and "The alternative plan with the greatest net economic benefit consistent with protecting the Nation's environment (the NED Plan), is to be selected unless the Secretary of a department or the head of an independent agency grants an exception to this Rule" (Section X 1.10.1).

While it is possible to interpret this language as restricting plan formulation to National Economic Development, the P&G in fact encourages considerable latitude in the formulation of plans to meet multiple, local objectives (see P&G, 1.6.4, 5b-5c). It should also be noted that achieving multiple objectives is not necessarily inconsistent with attaining National Economic Development. The New Waddell Plan, for example, has among the highest net economic benefits of any plan considered. If water resources planners narrowly construe the P&G and formulate plans only to maximize the NED objective, they may very well miss those alternatives that meet the NED objective and also address other issues that affect a plan's social, environmental, and political viability.

ACKNOWLEDGMENTS

The author would like to thank the staff of the Regional and Arizona Projects Offices, Lower Colorado Region, Bureau of Reclamation, and Debby Saint and Mark Bird in particular, for their assistance in preparation and review of this paper. The comments of the three reviewers were also very helpful in improving the quality of the paper.

LITERATURE CITED

Arizona Republic, 1978a. Flood Losses Blamed on State and SRP by Audubon Chief. Phoenix, Arizona, March 8.

Arizona Republic, 1978b. Rhodes Pushes for Orme Dam. Phoenix, Arizona, March 21.

Arizona Republic, 1978c. Arizona Delegation Presses Panel to Resurrect Orme Dam. Phoenix, Arizona, April 6.

Arizona Republic, 1978d. Orme Key to Floods, Rudd Told. Phoenix, Arizona, April 6.

Arizona Republic, 1978e. Editorial, Water or Eagles. Phoenix, Arizona, April 20.

Arizona Republic, 1981a. Support Grows for New Roosevelt Dam, Higher Orme Structure. Phoenix, Arizona, March 21.

Arizona Republic, 1981b. Phoenix Council Oks Orme Alternative 6 at Request of Mayor. Phoenix, Arizona, October 22.

Arizona Daily Star, 1978. Editorial, Wrongful Blame. Tucson, Arizona, March 21.

Bureau of Reclamation, 1976. Draft Environmental Statement, Orme Dam and Reservoir. Lower Colorado Region, Boulder City, Nevada.

Bureau of Reclamation, 1980. CAWCS Factbook: Public Forums, November-December 1980. Lower Colorado Region, Boulder City, Nevada.

Bureau of Reclamation, 1981a. CAWCS Factbook. Lower Colorado Region, Boulder City, Nevada.

Bureau of Reclamation, 1981b. CAWCS Appendix B, Public Values Assessment. Lower Colorado Region, Boulder City, Nevada.

Bureau of Reclamation, 1982. Summary and Evaluation of CAWCS Public Involvement Program, 1979-1981. Lower Colorado Region, Boulder City, Nevada.

Central Phoenix Sun, 1978. Editorial, We Still Say — Orme Dam Must be Built. Phoenix, Arizona, March 15.

Dennis, R. L., T. R. Stewart, P. Middleton, M. W. Downton, D. W. Ely, and M. C. Keeling, 1983. Integration of Technical and Value Issues in Air Quality Policy Formation: A Case Study. Socio-Economic Planning Sciences 17(3):95-108.

Department of the Interior, 1981. News Release, Office of the Secretary, Watt Announces Options for Continuation of Central Arizona Project. November 12.

Fischhoff, B., P. Slovic, and S. Lichtenstein, 1980. Knowing What You Want: Measuring Labile Values. *In:* Cognitive Processes in Choice and Decision Behavior, T. Wallsten (Editor). Erlbaum, Hillsdale, New Jersey.

Gardiner, P. C. and W. Edwards, 1975. Public Values: Multi-Attribute Utility Measurement in Social Decisionmaking. *In:* Human Judgment and Decision Processes, M. F. Kaplan and S. Schwartz, Editors. Academic Press, New York, New York.

Gendlin, F., 1982. A Talk With Mo Udall, Chair of the House Interior Committee. Sierra, July/August.

Hammond, K. R. and L. Adelman, 1976. Science, Values and Human Judgment. Science 194:389-396.

Kauffman, K. G. and A. Shorett, 1977. A Perspective on Public Involvement in Water Management Decisionmaking. Public Administration Review, September/October, pp. 467-471.

New York Times, 1981. Cost and Indian Opposition May Halt Arizona Dam Plans. New York, New York, November 4.

Ortolano, L., 1974. A Process for Federal Water Planning at the Field Level. Water Resources Bulletin 10(4):776-778.

Phoenix Gazette, 1978. Governor's Panel Backs Waddell Dam Over Orme. Phoenix, Arizona, October 3.

Rokeach, M., 1973. The Nature of Human Values. The Free Press, New York, New York.

Rorbaugh, J. and P. Wehr, 1978. Judgment Analysis in Policy Formation: A New Method for Improving Public Participation. Public Opinion Quarterly 42(4):521-532.

Schierow, L. and G. Chesters, 1983. Enhancing the Effectiveness of Public Participation in Defining Water Resource Policy. Water Resources Bulletin 19(1):107-114.

Scottsdale Daily Progress, 1978. Editorial, Shootout Over Orme. Scottsdale, Arizona, March 21.

Scottsdale Daily Progress, 1981. Leaders Will Support Waddell Plan. Scottsdale, Arizona, October 10.

State Press-ASU, 1978. Orme Controversy Rekindles. Tempe, Arizona, March 17.

Stewart, T., R. Dennis, and D. Ely (in press). Citizen Participation and Judgment in Policy Analysis: A Case Study of Urban Air Quality. Policy Sciences.

The Times, 1981. Rhodes, Rudd Visit Reservation, Still Favor Orme. Fountain Hills, Arizona, August 27.

U.S. Water Resources Council, 1973. Water and Land Resources; Establishment of Principles and Standards for Planning. Federal Register 38(174):24779-24869.

U.S. Water Resources Council, 1983. Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. Federal Register, March 10, p. 10259.

Wildavsky, A., 1979. Speaking Truth to Power: The Art and Craft of Policy Analysis. Little, Little and Co., Boston, Massachusetts.

Office of Surface Mining

The Office of Surface Mining, a companion agency of BLM in the Department of the Interior, has pursued off-site mitigation issues quite aggressively. This has been attempted under its mine plan permitting function as required by the Surface Mining Control and Reclamation Act of 1977. However, its authority for attaching stipulations requiring project proponents to respond to community effects has come under legal questioning and this has caused the agency to review its position.

Regardless, OSM attached stipulations to its approval of the Rawhide, Buckskin, and Rojo Caballo mines in Wyoming, the Colowyo mine in Colorado, and the Skyline mine in Utah. The measures, both required and suggested, addressed transportation of employees, housing, compliance with local laws and regulations, and monitoring.

Apparently, the most controversial measure was associated with Mobil's Rojo Caballo mine. The stipulation stated that "the applicant shall assemble, maintain, and analyze data on health service needs and crime rates in Campbell County, including Gillette. If local authorities determine that existing facilities are not sufficient, the applicant shall cooperate in identifying and implementing appropriate steps to mitigate the impacts."

Mobil protested this measure as a requirement that was not grounded in OSM's authorities. OSM and Interior subsequently removed the requirement. Of perhaps equal interest here is the language of the stipulation. It is

broad, imprecise, and subject to a variety of interpretations. Proponent responsibilities in implementing it could range from a virtually no-cost extreme to a very substantial set of costs. An inherent aspect of the Mobil complaint was more than likely the ambiguity and the difficulty of estimating costs associated with the requirement.

A final matter relative to OSM also deserves treatment. It is the dilemma within the Department of the Interior relative to off-site mitigation authorities and stages of Federal coal development. BLM possesses adequate authority under the Secretary's general welfare powers in the Mineral Lands Leasing Act (Section 30) to stipulate leases. However, at the leasing stage, so little is known about the eventual nature of the project that stipulations cannot be very precise. OSM, on the other hand, apparently lacks authority under SMCRA to require off-site measures. Yet, in permitting mine plans, OSM has access to detailed project information that allows focused mitigation.

Given the enabling legislation and the division of responsibility between the agencies, there is no apparent way to cleanly reconcile this situation. One possibility is the reservation of Interior authority to stipulate the lease at mine plan approval, contingent on more specific project information available at that time. However, the legislative mismatch between authority to respond to adverse effects through stipulations and the availability of project information is self-evident.

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission (FERC), an independent commission in the Department of Energy, has Federal licensing functions for power facilities. On occasion, this role requires FERC to become involved in off-site community mitigation questions. FERC has very broad authority to condition licenses (similar to stipulating leases) and has had occasion to exercise that authority. Two cases with very different results are described here which illustrate FERC's response to recommendations for social and economic mitigation.

The first case occurred in the early 1980's when several Alaska-based social service organizations and the State of Alaska petitioned the Commission to attach a requirement to the Alaska Natural Gas Transportation System license requiring prepayment of taxes. The petitioners acknowledged that revenues, upon completion of the pipeline, would be more than sufficient to cover additional costs to local jurisdictions that would be due to the pipeline operation. The expected problem was timing of the revenue stream. The revenues would not be available when needed most, during construction. The estimated amount of money involved was $19,700,000.

A Report to the Commission on the November 1981 Amendment to the Certification Cost Estimate, issued March 9, 1983, was prepared which very deliberately analyzed the situation. The outcome eventually was that the Commission rejected the Alaskan claims, based on recommendations in the report. The reasoning was that the massive Alaska tax revenues associated

with the pipeline's operation ($2 billion) would far exceed construction period-associated costs and that a loan arrangement between the company and the State was a feasible mechanism to deal with short-term deficits.

The second case involved a pump storage project proposed by the Virginia Electric Power Company in western Virginia. The siting of this facility was accompanied by a lack of agreement between the county hosting the socioeconomic effects and the sponsoring utility on the utility's role in assisting the county in managing project-caused growth.

The matter came before an administrative judge, serving the Commission. The proposal and the judge's discussion of its merits are included as Exhibit 6 for several reasons. First, it is a remarkably clear presentation of a situation similar to that faced by western communities undergoing energy development growth. Second, the discussion centers on several important legal and practical themes that deserve attention. Establishing responsibilities between host communities and project developers is both a conceptual and a practical problem. These issues are unavoidable in cases in which proponents are expected to directly assist in the funding of programs and facilities affected by growth. Third, the questions are jurisdictional. The Virginia Electric case involved the construction of a facility in one county with the bulk of effects expected to fall in another, adjacent county. This is similar to cases in the West where incoming revenues do not land in the jurisdiction (county or municipal) of greatest socioeconomic consequences. Eventually, the Commission affirmed the administrative judge's decision in the VEPCO-Highland County case.

Federal Energy Regulatory Commission

Excerpt from Virginia Electric Power Co., Project 2716

Issued September 20, 1976 Affirmed January 10, 1979

Proposed license condition:

Article 52. (a) The licensee shall consult and cooperate with units of local government regarding the socio-economic impacts of construction of the project and shall take all reasonable measures to mitigate those impacts.

(b) The licensee shall compensate Highland County, Virginia for expenses incurred by the County and directly attributable to the temporary residence within the County, during the period when the project is under construction, of persons who are employed by the licensee, its contractors and subcontractors (of any tier), in the construction of the project and persons dependent upon or who otherwise accompany such persons, to the extent those expenses are incurred to finance activities specified in paragraph (c) of this Article during the period when the project is under construction and to the extent those expenses exceed the revenues specified in paragraph (d) of this Article during that period.

(c) Highland County shall be entitled to compensation for expenditures paid or payable from funds of the County for the conduct of the following activities:

(1) Operation and maintenance of the County public school system.

(2) Law enforcement personnel, equipment, and facilities, including operation and maintenance of a jail.

(3) Construction, operation, and maintenance of solid waste disposal facilities.

(4) General administration of the County government.

(5) Welfare and social service programs which the County had been conducting before construction of the project began.

(6) Any other activity upon which the County and the licensee may mutually agree.

(d) In computing the amount the licensee must pay to compensate Highland County for the additional cost of conducting the activities specified in paragraph (c) of this Article, the licensee shall be entitled to credit for revenues received from the following sources:

(1) Increased tax revenues and fees attributable to the temporary residence within the County of the persons specified in paragraph (a) of this Article.

(2) Increased real estate ad valorem taxes paid by the licensee to the County during the period of project construction.

(3) Increased State and Federal grants-in-aid for the conduct of the activities specified in paragraph (c) of this Article, exclusive of general revenue sharing grants.

(e) The licensee shall meet with appropriate representatives of the County and shall negotiate for an agreement to carry out its obligations under this Article. The agreement shall be consummated not later than six months after the date this license becomes effective. A copy of the agreement shall be filed with the Commission. From time to time, and at least annually until the project is placed in operation, the licensee shall file with the Commission a report on the administration of the agreement and on other measures taken or planned to mitigate or avoid actual or potential socio-economic impacts of construction of the project.

(f) The Commission reserves the right, after notice and the opportunity for hearing, upon a finding that either the licensee, Highland County, or any other party has failed to negotiate or otherwise act in good faith for the mitigation of socio-economic impacts of construction of the project, to take one or more of the following actions:

(1) Order the licensee to take such steps to mitigate socio-economic impacts, including the payment of money, as the Commission deems necessary or appropriate.

(2) Rescind or suspend one or more of the licensee's obligations under this Article.

(3) Take such other or further action as the Commission deems necessary or appropriate.

(D) The Exhibits designated and described in paragraph (B) above are hereby approved to the extent indicated therein and made a part of the license.

Administrative Law Judge's discussion and reasons for decision:

VII. Socio-economic Impacts of the Project.

One of the most pressing issues in this case concerns the socio-economic impacts of the proposed project. Although the power-generation facilities would be sited in Bath County, they would be located only a short distance from the border between Bath County and Highland County, which adjoins Bath County on the north. The generation facilities would be in the tax base of Bath County, with only a short stretch of transmission-line corridor located in Highland County. VEPCO's current plans call for a large proportion of construction workers whose labor will build the project (some 1,800 in number, plus accompanying dependents, though, of course, all will not be present at the same time) to live in three new communities, one of which would be located in Highland County. The plan is essentially conceptual now. The only concrete step VEPCO has taken has been to acquire nearly 600 acres of land in Highland County, located 22 miles from the project site, and to commission a site plan for a temporary community.

Highland County intervened in this proceeding to seek the Commission's help in dealing with the impact of the influx of construction workers and others during the six-year period of constructing the Bath County project. It presented evidence and

filed a brief designed to show that the Commission should, by conditions inserted in the license, require VEPCO to reach a formal agreement with County officials under which the County would receive a financial subsidy designed to mitigate the effects of the influx of new, mostly transient, people. 85/ Its principal areas of concern are the impacts on (1) the educational system; (2) law enforcement; (3) solid waste disposal; (4) fire and emergency services; (5) welfare services and benefits; (6) human and community relations; (7) health care services; (8) general government operations; (9) local businesses and the local labor force; and (10) land-use planning.

VEPCO's position is that it is willing to reimburse Highland County, as well as the other nearby jurisdictions, for most of the additional governmental costs incurred as a result of the influx of construction workers, to the extent those costs exceed new tax and other revenues resulting from the influx. In spite of this general agreement in principle with the County, there are some serious disagreements with the details of the arrangements sought by Highland County officials, which have prevented the parties from consummating an agreement during several months of off-again-on-again negotiation. In general, VEPCO takes the view that its obligation extends only to costs incurred by the government for services provided by the government (e.g. education expenses) but not for new programs designed to mitigate impacts in areas not now the subject of government services (e.g. support of the volunteer fire and rescue squad). Furthermore, there is disagreement about the mechanics of the arrangements. Highland County wants an escrow fund established so that it will not have the burden of initial financing, while VEPCO insists on a reimbursement-for-expenditure program. Highland County wants VEPCO's basic obligations set forth in the license and asks that the license be conditioned so that it will not take effect until final agreement is reached; VEPCO resists both of these suggestions. Finally, VEPCO argues that the County's suggested license conditions, which would give the County unrestricted discretion to fill in the grey areas; e.g. to determine

---

85/ Bath County also intervened, but it did not present evidence or file a brief. Thus, we do not know what its position is on the hearing record.

how many pupils in the public schools are "project-related", amounts to awarding it a blank check. The Staff's position is that basic responsibility for resolving the issues rests with VEPCO and Highland County. At the same time, the Staff asserts, the Commission has a responsibility to mitigate socio-economic impacts arising from the locus of the project. To carry out this responsibility, the Staff proposes that the license should contain a condition requiring the licensee to consult and cooperate with local governments and to take all reasonable steps to mitigate socio-economic impacts of construction. Periodic reporting to the Commission on the licensee's progress would also be required under the Staff's proposal.

Highland County is the least populous and one of the poorest counties in Virginia, having a population of less than 2,500 and an average per capita income of about $2,000. The mean average age of its residents is 40.8 years (vs. 26.8 years for the State as a whole). The County is rural. It has no major industries. It has been losing population for many years as young people move away. The County government's annual budget is about $775,000, more than 80 percent of which is spent on the school system. There are about 500 students enrolled in that system. The County's law enforcement staff consits of an elected full-time sheriff and a part-time deputy sheriff who runs the jail. Fire protection and emergency ambulance service are furnished by volunteers. The County has one physician, a general practitioner, and no hospital.

It seems clear that Highland County will suffer a considerable, though temporary, impact -- in both material and human terms--from new residents who may move in to work on construction of the Bath County project, bringing their dependents, then depart. 86/ The question the Commission must resolve is the

---

86/ Long-term impacts from operation of the project would appear to be minimal, however. Only 30 or so permanent employees, some of whom would be local residents, will work at the project. Tr. 215. It is fair to assume that they will find homes at various locations in the area. Bath County will find itself enriched by at least $3 million annually in additional tax revenues, which represents three times the current yearly budget of the County. Id.

extent to which its own jurisdiction and sound public policy warrant imposition of rules for breaking the impasse that thus far has disabled the parties from arriving at a mitigation program by private ordering. If the Commission has a rulemaking role to play, the question that arises is what norms should be mandated. As we have seen, the parties responding to this issue have taken widely disparate stances on these questions. The positions range from Highland County's desire for a series of license conditions spelling out VEPCO's obligations in fairly explicit detail to the Staff's request for a single license article establishing only a generalized obligation to mitigate unspecified socio-economic impacts to VEPCO's laissez-faire approach to the problem.

The issues are made no less difficult by the fact that the Commission is working in an area intersected by two potentially contradictory strands of the law. There is, on the one hand, the obligation of all Federal agencies imposed by the National Environmental Policy Act to articulate and consider the socio-economic impacts of major Federal actions, the so-called "quality of life" consequences of their activities. 87/ That obligation certainly carries with it a duty to take reasonable steps within the agency's jurisdiction to ensure that adverse impacts are mitigated as far as possible.

The other skein of the law is a concept implicit in what has become known as the "right to travel", a constitutional principle whose recent development has been apotheosized in such cases as Edwards v. California, 314 U.S. 160 (1941) and Shapiro v. Thompson, 394 U.S. 618 (1969). A concomitant of the right of

---

87/ See Chelsea Neighborhood Assns. v. United States Postal Service, 516 F.2d 378, 388 (2d Cir. 1975); Hanley v. Mitchell, 460 F.2d 640, 647 (2d Cir.), cert. denied, 409 U.S. 990 (1972); Ely v. Velde, 451 F. 2d 1130 (4th Cir. 1971); Trinity Episcopal School Corp. v. Romney, 387 F. Supp. 1044 (S.D. N.Y. 1974); Prince George's County v. Holloway, 404 F. Supp. 1181 (D.D.C. 1975).

persons in the United States to settle where they choose is the prohibition of the adoption by States and localities impacted by new population influxes of governmental policies which would reserve to long-time residents the resources and benefits of the target community. See Memorial Hospital v. Maricopa County, 415 U.S. 250 (1974). From these principles there emerges the concept that Highland County, as a matter of law, has no right to insist that construction workers and those who accompany them should not share equally with permanent residents the benefits, resources, and freedoms of the County on a non-discriminatory basis. The new and transient residents may not be relegated to ghettos, nor do the long-term residents have a right to indefinite continuation of their bucolic isolation. Harsh though this may seem, it is indisputable. Thus, the County may not insist, as it seems to do in its brief, that available medical-care resources be reserved for local residents, for it is clear that a State or local government may not "limit to its own residents the general medical care available within its borders." Doe v. Bolton, 410 U.S. 179, 200 (1973).

To say that Highland County is not entitled to look to VEPCO (or the Commission, for that matter) to maintain its current way of life without change does not dispose of the question entirely, however. The fact remains that cutting a pie into a larger number of slices gives each recipient a smaller share, even though the slices are cut in a non-discriminatory manner. Fidelity to the directive of NEPA requires the Commission to ask what can be done to increase the size of the pie, bearing in mind that Highland County's insularity will be irretrievably diminished, come what may, as the result of constructing the Bath County pumped storage project. 88/ The mechanism must be an agreement between VEPCO and Highland County, with the Commission's role limited to an action-forcing set of guidelines for such an

88/ In this respect it is refreshing to note that Highland County's initial brief asserts, at the outset (p. 1), that it "does not oppose the construction or operation of the project." Equally refreshing is VEPCO's willingness in principle to pay hard cash to the County to alleviate the impacts of construction.

agreement, coupled with an escape valve for resolving impasses. The guidelines must be broad and general, not as detailed as Highland County has suggested, bearing in mind that the Federal Power Commission has no "broad license to promote the general public welfare" (NAACP v. FPC, 44 U.S.L.W. 4659, 4661 (U.S. May 19, 1976)), and cannot, for reasons noted above, grant the County's request for escape from all impacts of project construction.

It is clear at the outset that several of the socio-economic questions raised by the County are outside the scope of VEPCO's or the Commission's obligation to mitigate impacts. There is, for example, what may be termed the camp-follower problem. VEPCO plans to have certain facilities, e.g. shopping, at the construction workers community operated by franchised businessmen, some of whom may come from outside of the County. Thus, there is the possibility of in-migration not only by construction workers, other employees of the construction contractor, and their families, but also by individuals who are not directly employed in the construction work and do not accompany those who are so employed. In my judgment, subsidization of the costs of absorbing persons in these latter categories should not be VEPCO's responsibility. This is the case because, given Highland County's pre-existing vulnerability to settlement, it is simply impossible to differentiate between persons who chose to reside in the County for no other reason except the propinquity of numerous construction workers and those who immigrate for combinations of motives more traditional in a highly mobile society. Presumably, there have been, and will continue to be, people who will choose to settle in Highland County because they find it a desirable place to live. Absorbing them is the County's responsibility. Hence, VEPCO can in justice be charged with the net fiscal burden of only those who are brought to Highland County for the specific purpose of constructing the project and those who accompany such persons.

Furthermore, Highland County cannot rightfully insist on the establishment of programs which invidiously discriminate against project workers from outside the area and in favor of local residents. The Commission must reject the County's request for a license condition which would obligate VEPCO to house all

project-related residents on a single site. 89/ Project workers have rights too; they should be entitled to live wherever they want to live and should not be confined to a ghetto. Similarly, the Commission has no business requiring a program of job training for, and preferential hiring of, local residents. This is not to say, however, that the construction contractor may not establish such a program voluntarily or under compulsion of laws other than the Federal Power Act. 90/ But there is no basis in the concept of mitigating environmental impacts to impose such an obligation under the aegis of the Federal Power Act.

Similarly, the County is not entitled to a license article which would give it rights to the land on which VEPCO's construction workers' community is situated superior to those it would have with respect to any other parcel. There has been no persuasive justification shown for giving the County a right of first refusal over this property by directive of the Federal Power Commission--particularly when it has no such right over other landowners' property and its power of eminent domain remains unimpaired. Of course, VEPCO may voluntarily agree to give the County a right of first refusal.

Nor has there been made out an adequate case for compelling VEPCO to fund a number of new programs that the County does not now enjoy. Specifically, the Commission must reject the County's request for a license condition requiring VEPCO to "compensate

---

89/ The proposed license condition (Article F) set forth at page 21 of the County's brief would simply require VEPCO to have housing "sufficient to house all temporary project-related residents in the project area." But the tendency of such a requirement is to induce VEPCO to require the employees to live in the facilities thus provided, since it would amount to economic waste to build housing which would stand unoccupied.

90/ Query whether a preferential hiring program drawing upon a largely white local labor pool would not place a contractor in violation of his obligations under Title VII of the Civil Rights Act of 1964, 42 U.S.C. 2000e-2.

Highland County for a community relations programs designed to improve communications and interactions between permanent County residents and temporary project-related residents and between County residents and /VEPCO/." 91/ This argument is posited upon the testimony of a professor of Agricultural and Rural Economics at Virginia Polytechnic Institute, who was an expert witness for the County. He testified, inter alia, that the influx of construction workers will create numerous human and community relations problems owing to the fact that "permanent residents are relatively older, less affluent, and more homogeneous than the CWC /Construction Workers Community/ residents are likely to be. Therefore the traditions and culture of the permanent community will be severely strained. Permanent residents may choose to accept or reject the new newcomers." 92/ This seems a wholly speculative basis for requiring VEPCO to pay for a brand-new community relations program, especially one run by the political representatives of the permanent residents. As the witness said, the latter and the construction workers may very well accept each other. From our present perspective, realizing that hydroelectric projects are frequently built in rural areas without the opening of hostilities between local residents and construction workers, peaceful accommodation seems more probable than not. Furthermore, with all due respect to practitioners of the Dismal Science, one cannot conclude that the witness' expertise is sufficient to warrant embarking VEPCO on responsibility for supporting a new and untried program based entirely upon his generalizations.

For similar reasons, the record does not support the County's plea for a license condition requiring VEPCO to subsidize the present volunteer fire and rescue squads. Highland County is apprehensive about the capability of the current volunteer organizations to serve both the current need and the new demand resulting from the influx of construction employees. It seeks a

---

91/ Highland County's initial brief, p. 20.

92/ Tr. 2113-2114.

commitment by VEPCO to compensate it for additional facilities, personnel, and equipment which, in its judgment, are required to meet the new demands, to the extent that the construction workers do not voluntarily supply money and manpower to augment the present resources. Certainly, the County's concern is a legitimate one. But we cannot at this juncture say that its fears will be justified. It is possible that the new temporary residents will participate in the volunteer fire and rescue squads to the same extent as older residents. In light of these factors, as well as the non-governmental character of the present fire and rescue activities, it would be premature and unnecessary to require VEPCO to subsidize those activities as a condition of licensing.

The County's proposal for a license condition requiring VEPCO to ensure that the present primary medical care physician-to-patient ratio is not disturbed also suffers from prematurity in addition to the imponderable problems of administering such a condition. It should be noted that considerable new medical care resources will undoubtedly flow to the County under the impress of the provisions of the Occupational Safety and Health Act and Department of Labor regulations thereunder, which will compel the construction contractor to have trained medical personnel available at the worksite to treat construction workers. 93/ While these new resources will probably be located in Bath County, they will soak up a large portion of the new demand for medical services resulting from project construction. Nor should VEPCO at this time be saddled with the cost of establishing and operating a health outreach clinic, a facility which the County does not now have and the need for which is entirely speculative. VEPCO has committed itself, and will be required, to contribute to the incremental cost of general governmental services which can be attributed to project construction and which are not covered by increased tax and other revenues attributable to the same cause. If the County's present public health activities must be expanded as a result of project-related influxes, therefore, VEPCO will share the added expense.

93/ See 29 CFR 1910.151, 1926.50.

In general, therefore, I conclude that VEPCO's responsibilities for mitigation of socio-economic impacts should be limited to the marginal increase in the expense of conducting current governmental programs which are not covered by increased revenues and which are attributable to an influx of persons employed directly on project construction and persons accompanying them. Those responsibilities would include the following:

1. Education. No one disputes the inevitability of subsidization of the school system in Highland County. It is estimated that as many as 350 school-age children may be living at the construction workers community, 94/ and if all choose to attend the Highland County Schools, enrollment will increase by 70 percent. 95/ VEPCO should be required to defray some of the increases in the school budget that will result from the influx. The County has proposed a specific formula, 96/ which seems faulty in a number of respects, among them its failure to give VEPCO credit for the increased taxes stemming from its presence. For reasons discussed below, moreover, the Commission should not set forth specific compensation formulae in the license, in any event, but should encourage the parties to devise them through negotiation.

94/ Tr. 2181.

95/ This is an outside figure. As noted above, it is unlikely that all of the construction workers who will be employed on the project and their families will be present at the same time. Some will arrive, do their part of the total job, then leave to be replaced by others working on later stages of the construction process.

96/ VEPCO to pay "(1) the average per capita operational costs of the school system multiplied by the number of project-related students and (2) additional expenditures (not included in operation costs) required to serve the increased enrollment, such as additional classrooms, school buses, furnishings and the like."

2. Law Enforcement. Here again, there appears to be agreement in principle upon subsidization by VEPCO of additional costs of increased law enforcement activities which are attributable to project workers and those who accompany them. The formula for determining the costs is a subject to be negotiated by the parties.

3. Solid Waste disposal. The County operates a sanitary landfill area, which it says will fill up faster and be more expensive to operate because of the influx of project workers. No projections or other data have been presented for the record, and it is questionable whether, in a rural area, demonstrable cost increases from the greater quantity of solid wastes would amount to more than a de minimis sum. Nevertheless, this is a legitimate area for negotiation between the parties. Of course, the County may, under its governmental powers, insist that adequate pick-up and disposal services for the construction workers' community be provided as a condition of occupancy.

4. General government costs. Highland County says that its general government expenditures, for such things as revenue collection and facilities for administrative employees, will temporarily increase as the result of the influx of construction workers. The notion is not unreasonable, albeit there is little evidence to support it. On the other hand, VEPCO has not interposed a specific objection to sharing the increased costs. This appears to be an appropriate area for negotiation.

5. Welfare and other social services. VEPCO has exhibited extraordinary hostility toward the County's request for sharing of welfare and similar benefits paid to persons temporarily residing in the County on account of the project. It argues that construction workers are, ipso facto, employed and unlikely to be eligible for benefits, that it is impossible to measure the utility's potential liability, and that it would be difficult to determine which recipients are the licensee's responsibility. Behind this farrago of naysaying there is, at root, simply a distaste for the concept of welfare benefits, summed up in VEPCO's plaint: "Welfare is a morass that should not involve a licensee." 97/ A morass welfare may be, but it remains a potential

---

97/ Reply brief, p. 31.

ourden that the County cannot sustain without some assistance. Considered objectively, it is little different in character from any other expense of modern government, many of which are by mutual agreement subject to cost sharing. To argue that the project employees will not impose a higher burden on the County misses two essential points: first, many benefits are not paid solely to the unemployed; second, if VEPCO's confident predictions are true, its liability will be zero, and it can hardly object to that. The task of identifying higher welfare costs with project workers is surely no more difficult than the task of identifying increased education costs with project workers. The question of establishing a maximum liability figure is one upon which the parties should negotiate, since it is present in all areas.

For these reasons, it is my conclusion that the license should be conditioned to require the licensee to extend financial assistance to Highland County to mitigate the impact upon the County's fisc resulting from the influx of project workers, their families and others who accompany them (but not persons who migrate to the County to purvey goods and services to project workers) during the period of project construction. The assistance is necessary in the following areas of additional costs, to the extent they are not covered by increased tax revenues and fees attributable to the presence of project workers or increased financial assistance from other levels of government: (1) education; (2) law enforcement; (3) solid waste disposal; (4) general government costs; and (5) welfare and other social services.

This brings us to the question of mechanisms. As we have seen, Highland County has sought to have the Commission require VEPCO, as a condition of receipt of a license, to abide by rather concrete standards for payment. 98/ The Staff would simply require

---

98/ VEPCO asks, rather facetiously, whether the Commission can condition a license without first issuing one. Clearly, the Commission may issue a license but condition the right to act under it -- which amounts to much the same thing. But this does not detract from VEPCO's criticism of the County's specific proposals, that they would vest uncontrolled discretion in the County to resolve disputes. This objection is well-taken.

the parties to agree, without more.

The history of the parties' dealings thus far would seem to demonstrate that the latter suggestion is a prescription for futility. Though VEPCO and Highland County have met face to face and have corresponded for months, there has been no meeting of the minds on any point. As has been said before, no useful purpose would be served by attempting to assess blame for the contretemps and the missed opportunities. What is necessary now is for the parties to negotiate a solution in a framework which tends to induce mutual agreement.

No agreement which is externally mandated will work. The Commission lacks the evidentiary tools and the institutional mechanisms to impose a modus vivendi or to administer it. So Highland County's basic position must be rejected too. A middle ground seems most appropriate. The license should contain a condition requiring VEPCO and the County to negotiate in good faith and, before a prescribed deadline expires, 99/ to arrive at an agreement under which VEPCO will compensate the County for the added costs found to be within the scope of its responsibility.100/ This is what Article 52 of the license, infra, would do. It would require the licensee to negotiate with Highland County for an agreement under which VEPCO would compensate the County for additional expenses of (1) education, (2) law enforcement; (3) solid waste disposal; (4) general government costs; and (5) welfare and social services attributable to the temporary residence in the County of persons employed to work upon the project and persons accompanying them during the period of project construction, but only to the extent those expenses exceed (1) new tax revenues and fees attributable to such persons; (2) increased

---

99/ I have selected six months from the date the license issues, but some other reasonable period would do equally as well.

100/ The County, fearful of its inability to finance those costs, wants VEPCO to establish an escrow fund. VEPCO says that it can, and will, establish a mechanism for payment of bills when due so that an escrow fund would be unnecessary. VEPCO's position seems reasonable and should at least be given a try.

State and Federal aid attributable to such persons; and (3) increased taxes on real estate and improvements thereon paid by VEPCO. Reporting to the Commission on the results of such negotiations is required, and the Commission will hold itself open to entertain and resolve allegations that one party or the other has failed to negotiate in good faith. Upon a finding that there has been a failure to bargain in good faith, 101/ the Commission may take appropriate action to resolve the impasse, including ordering suspension of work under the license or absolving VEPCO of some or all of its obligation to defray part of the cost of mitigating the socio-economic impacts.

VIII. Miscellaneous Matters.

The foregoing discussion deals with the major litigated issues of moment in this proceeding. There are, in addition, several matters of lesser interest that are worth discussion because they were once contested, are still contested but lack the general interest of the major points, or relate to matters on which the Commission is obligated to render a judgment regardless of the dispositions of the parties. Consideration of those matters produces the following:

1. Transmission-line routing--As noted above, the plans for the Bath County project call for two transmission lines emanating from the powerhouse. One would follow a northerly routing terminating at the Valley Substation. The second would be routed to the south to the Lexington Substation. Through its consultant, VEPCO made a thorough investigation of the environmental and social consequences of a number of alternative plans for routing the transmission lines. 102/ A proposal to move the segment of the northern line farther north between a point just west of the Cowpasture River and a point just east of Parnassus was made by the Virginia Wilderness Committee. The Committee had sought to avoid crossing Crawford Mountain. The Committee made its proposal in the belief that the Forest Service might maintain

---

101/ For use of the bargaining in good faith concept by the Commission in another context see Just and Reasonable National Rates for Sales of Natural Gas (Op. No. 699-H), 52 F.P.C. 1604, 1632 (1974).

102/ See Tr. 1690-1744; Ex. 94-112.

Chapter VI

American Indians

Introduction

Federal mineral leasing occasionally is proposed or takes place in the vicinity of Indian reservations. In several cases, affected tribes have requested that the BLM take action to enhance beneficial or to reduce adverse socioeconomic impacts on the tribes and their members that result from such off-reservation activity. These requests are generally raised in the context of the unique legal relationship which exists between such tribes and the Federal Government. Included in this chapter is a brief discussion of the Secretary's trust responsibility to Indians and the consideration of Indians in the Mineral Leasing Act.

Secretarial trust responsibility

The Secretary of the Interior has responsibilities for both Federal mineral leasing and for lands and other resources held in trust for Indians and Indian tribes. In some cases, Indian advocates have asserted that these responsibilities converge in cases involving off-reservation Federal coal leasing near reservations. That is, it is argued that trust responsibilities preempt other responsibilities. Generally, legal opinion within the Department of the Interior, in consideration of specific cases, has not supported

this assertion. First, the concept of trust centers on the land or other resources held in trust. It extends to human welfare functions only to the extent that these functions are linked directly to the land or other resources held in trust. Second, the Department of the Interior must provide Indian interests with equitable consideration in the exercise of other functions, such as mineral leasing. Certainly, where impacts will affect lands and resources held in trust, the Department has an obligation to be aware of that fact and take it into consideration. The trust responsibility of the Secretary coupled with NEPA requirements clearly necessitates the consideration of impacts on affected Indians and Indian tribes in environmental analyses. However, this has not been interpreted to mean that trust responsibilities, arising out of statutes, treaties, and executive orders, must necessarily override other functions of the Department.

In a recent decision involving Round I Powder River Basin coal lease sales in the vicinity of the Northern Cheyenne Tribe in Montana, Northern Cheyenne Tribe v. Hodel, Civ. No. 82-116-BLG (May 28, 1985), the Federal District Court for Montana held among other things that based on his trust relationship with that tribe, the Secretary of the Interior was obligated to consider off-lease socioeconomic impacts to the tribe, and if his analysis indicated adverse effects to the reservation as a result of coal leasing, to implement measures to mitigate such impacts (slip op. at 30). However, the court left open the method by which the Secretary was to implement such mitigation measures. Thus whether the Secretary is to include socioeconomic mitigation lease stipulations or provide mitigation measures through some

other method (e.g. via BIA monetary or other assistance) was left open. A more thorough discussion of this opinion will be added when the case is finally resolved (Also see Chapter X).

The Mineral Leasing Act and Indian Tribes

The Mineral Leasing Act is silent regarding Indian issues. Under Section 35, the respective States are allocated a portion of Federal funds received from leasing and development. Federally recognized Indian tribes are not, however, singled out for similar treatment. Thus, tribes which undergo adverse effects due to the nearby, off-reservation leasing of Federal minerals do not have direct access to the principal Federal mechanism to alleviate problems - the bid, rental, and royalty shares. The tribes may seek distribution of these funds from the States. The States, at their discretion, may allocate appropriate funds to the tribes just as they do to any of their other constituents, but they are not required to do so under Section 35.

Chapter VII

State Government Programs

Introduction

This chapter is designed to provide brief descriptions of the mechanisms that the major Western coal and oil shale States have developed to deal with rapid energy-related community growth. These States are: Colorado, Idaho, Montana, New Mexico, North Dakota, Utah, and Wyoming.

The focus is on special State level programs that have been created over the last several years. Most of these agencies, offices, programs, and approaches are enabled by State legislation, which is cited as part of the individual State writeups. Typically, the programs are based on distribution of severance tax monies but there are exceptions.

One difficulty from Interior's perspective in developing a uniform socioeconomic mitigation approach is the variability across States. Several of the State programs are quite structured and predictable. Others are more flexible, permitting greater discretion among State and local officials. Some approaches call for State funding intervention between developers and communities while others promote direct payments to localities. Severance tax distribution is an example of the former while the Western Fuels settlement in Rio Blanco County, Colorado is an example of the latter.

Federal mitigation activities face a moving target from State to State. The States themselves are both allies and competitors as they individually seek to attract economic growth and stability - but at least cost to the State and local political subdivisions.

The approaches within each State are here discussed. Across the States, it is more difficult to portray, in general terms, what has happened and is happening. One source is the Western Governors' Policy Office (WESTPO). This organization has drafted a report entitled Resource Development: Dealing with Change (Rough Draft, September 30, 1982). It is an attempt to summarize regional economic change. It states that:

> In general, considerable progress has been made in working at financing arrangements to relieve the demands on local government. Through such mechanisms as up-front payments by industry, pre-payment of taxes, underwriting of debt, purchase of local government bond issues, State loans, payments from leasing or severance tax revenues and other means, it has been possible to provide up-front capital and protect the financial liability of local taxpayers.

Indeed, it appears from this report that the present economic environment has led to facility closure as the major social and economic mitigation issue in the West. Both cyclical and structural declines in the copper, uranium, coal, and oil-gas industries are presenting major problems for communities in the region. Grants, New Mexico (uranium) and Anaconda, Montana (copper) are two noteworthy cases but they are not unique. These reversals have resulted in contemplation of plant closure legislation, attempts to diversify local economies, and creation of economic adjustment task forces within the States.

One thing that comes through strongly is an emergent concern with the down-side of industrial development. It is very likely that State-local officials will be more insistent on Federal analysis and consideration of eventual community reaction to closures than has been the case. Technically, this is problematic, as socioeconomic forecasts beyond just a few years are quite speculative. In fact, there may not be a whole lot that is actually fixable from the Federal side - other than recognition of potential problems. This is the flip-side of the growth issue.

From the Federal perspective, it is a fact that most of the funding action rests at other levels of government. For Federal officials, this situation means they may be held responsible for community problems due to minerals development but lack the means to actually reconcile them.

Colorado

There are two major statewide activities in Colorado for identifying and responding to anticipated rapid growth. First, there is the Cumulative Impacts Task Force (CITF). Second, there is the Joint Review Process (JRP) developed to facilitate decisions required through permitting. However, despite the notoriety of the Colorado innovations, neither of them directly focuses on socioeconomic impact mitigation funding.

The Cumulative Impacts Task Force is simply an analytical device. Supported by State, local, and Federal entities, along with private-sector developers, it is designed to provide a current information base and broadly shared assumptions for forecasting. Its use is voluntary but the findings can obviously be used to determine accountability with regard to a single project relative to other projects (in or out of the baseline). The strength of CITF is its public-private sponsorship and its consolidation of numerous forecasting methodologies into a single, shared, accepted approach. The idea is that everyone should be using the same baseline and forecast numbers. This data base is being maintained.

The Joint Review Process (JRP) is a mechanism to avoid duplication and delay in permitting without endangering the autonomy of various Federal, State, or local entities. After a project proponent chooses to enter a project, a JRP Team (composed of representatives of relevant organizations) is developed, and a permit decision schedule is agreed to by the proponent and the team.

The ideas behind JRP are:

- it is voluntary.
- it is an alternative to conventional permitting.
- it encourages early industry disclosure of plans.
- it encourages concurrent (rather than sequential) scheduling of permit decisions.

In short, JRP makes - through its multiple government level and multiple agency approach - life a bit simpler for companies seeking permit decisions. Presumably, involvement on the part of any organization does not bias the decisions of any other involved party. However, it would appear that JRP might be an effective venicle for negotiations that are more positive and active (i.e., less reactive) than is often the case.

Both CITF and the JRP have been favorably received. Given their limited objectives, both approaches are operational and effective. However, when all is said and done, the real action on socioeconomic mitigation in Colorado is at the local level. County commissioners and council people may participate in JRP and use CITF numbers but they really possess the power to set the conditions under which major projects are approved or disapproved. If a funding deal is to be cut (as in the Rangely, Rio Blanco County, and Western Fuels situation), local sources are in key positions to make it happen through - for example - Special Use Permits. A couple of Colorado counties (Garfield and Rio Blanco) that were once the likely location of synfuel facilities have ordinances requiring the preparation of socioeconomic assessments and mitigation plans by project proponents.

Montana

Montana has an unconsolidated approach to mitigating the effects of various types of mineral development. For this reason, this discussion will be tied to the three major approaches - for coal, oil and gas, and hard rock minerals.

A. Coal

Community effects falling in the public sector caused by coal development are handled by the Montana Coal Board, which receives applications from affected local governments and school districts and distributes the funding. The source for several years was 8.75% of the coal severance tax but this was reduced to 3.0% in 1985 as the legislature shifted revenues to avoid a tax increase.

Applications are judged using the criteria of need, severity of impact, degree of local effort, availability of funds, and consistency with local planning. Through December 1985, about $58 million had been granted to local governments through the Coal Board. Projections for severance tax income devoted to local assistance are $3.1 million for 1986 and $2.95 million for 1987. These projections are obviously tied to production forecasts.

A 1983 amendment to the severance tax distribution program in Montana made federally recognized Indian tribes and States agencies eligible for up

to 7% of the funds allocated for community assistance. Through December,1985, about $505,000 had been granted to the Northern Cheyenne tribe through this process.

B. Oil and Gas

Annual increments in severance taxes on oil and gas in Montana are distributed via a formula to municipalities and counties of production. There is a relationship between production and funds. There is no relationship between exploration and funds. Thus, there can be serious problems with regard to predictability and responsiveness of the program. This has been the case in northeastern Montana (the Williston Basin) where much exploration (and growth) took place prior to production and receipt of funds in the late 1970's and early 1980's.

C. Hard Rock Minerals

Montana's approach to addressing hard rock mineral effects was developed in 1981. A Hard Rock Board was created to administer the program and reconcile differences between developers and local governments. Developers can prepay property taxes, make direct payments to units, and may be required to post educational impact bonds. The administration of the program is funded by a metal mine license tax through the general fund.

Unlike the coal and oil-gas programs in Montana, the hard rock approach encourages local-State-industry cooperation in dealing with effects.

This is accomplished through the preparation and review of an impact mitigation plan submitted to the board and the affected counties. "In the impact plan, the developer shall commit itself to pay all of the increased capital and net operating cost to local government units that will be a result of the development, either from tax prepayments, ... , special industrial educational bonds, ... , or other funds obtained from the developer and shall provide a time schedule within which it will do so." There is an appeals process available to local units if they object to the plan. The board itself seeks to reconcile differences if the two parties cannot reach an agreement. Judicial review is also available to either party if it is aggrieved by the board's decision.

In addition to these three main approaches, Montana has a couple of other noteworthy policies. First, the Major Facility Siting Act presents the opportunity for the Board of Natural Resources to attach socioeconomic mitigation stipulations to its certification of power plants, gasification facilities, and so on. It does not appear that such stipulations can be attached to permits sought under Montana mining laws. Major facilities in Montana must be screened by the State equivalent of NEPA and it is this analysis which gives the State a hook on documentation of effects. Since much Montana coal is not suitable for export, the Facility Siting Act may be a powerful tool in responding to community problems. Unlike Coal Board grants which are directed only to the public sector, the Board's certification process applies to private sector issues as well (e.g., housing).

A second venicle in Montana is the educational impact statement. This can be required by the local superintendent of schools upon notification that a facility or mine is proposed within his/her jurisdiction. This statement, describing the effects of the proposal on the school system, is evidence toward bringing a bond issue before voters. Approval of such an issue permits the school district to exceed the bonding limitation. The project proponent pays, in addition to routine property taxes attached to education and prepayment of other taxes, the excess in principal and interest above the limitation.

It should be clear that Montana presents a broader array of mitigation strategies than other western States. Mines, facilities, and transportation are segmented. Coal, oil and gas, and hard rock minerals are segmented. This presents difficulties for proponents and for local officials, who, according to a source in Montana, are never sure about what and how much to expect, given a certain action. For these reasons, Montana is probably the trickiest situation for Interior personnel to coordinate with State counterparts on leasing and production, even exploration, socioeconomic mitigation.

New Mexico

New Mexico State government involvement in impact mitigation is through the New Mexico Community Assistance Act of 1977 under which grant allocations are made to energy and mineral impacted communities within the State. Initially, funds were administered by a Community Assistance Council under the Energy and Minerals Department. In 1984, New Mexico consolidated the administration of the State-funded New Mexico Community Assistance (NMCA) program with that of the federally-funded Community Development Block Grant (CDBG) program within the Department of Finance and Administration. This merger was intended to provide a more efficient means of funding basic infrastructure and community development needs. A Community Development Council was created in 1984 to allocate both NMCA and CDBG funds.

The NMCA program was established to assist communities in the development of basic infrastructure facilities and the provision of adequate, safe and sanitary services for residents, particularly those faced with rapid growth or loss of tax base. All counties and incorporated municipalities are eligible to apply as well as a number of special districts and associations. Indian pueblos and tribes are not, however, eligible to apply because they are not political subdivisions as defined by New Mexico statute.

Funding for the capital improvements under NMCA is generally legislatively appropriated (using State severance tax bond monies), but on occasion general revenue funds have been used. Public educational facilities are

specifically excluded from the program. Grants may be used for real property acquisition, construction, improvement or rehabilitation. Maintenance and operations may not be funded under NMCA.

As in other States, the Council has put together an application process. The same basic application procedures are followed for both CDBG and NMCA proposals. Unlike other States, New Mexico will not approve a project which may result in increased demand for water unless it can be shown that the applicant either holds or can acquire water rights sufficient to meet the increase in demand. Otherwise, the application procedures appear to be less elaborate than those of other States.

Annual appropriations under the NMCA program are displayed below:

Year	$ (in millions)	
1977	10.0	
1978	1.5	
1979	8.0	(plus a $500,000 planning grant)
1980	5.0	
1981	10.0	(plus a $150,000 planning grant)
1982	none	
1983	10.0	
1984	7.5	
1985	7.5	

Funding has been relatively erratic and it is not known how this has affected community responses to rapid growth.

North Dakota

The Energy Development Impact Office has much of the State level action in mitigating socioeconomic effects in North Dakota. Funding sources are the coal severance tax, coal conversion tax, and the oil and gas production tax. Loans and grants are available for local jurisdictions.

The Director of the Impact Office, appointed by the Board of University and School Lands, is given broad discretionary authority by the enabling legislation. In accordance with the law, the Director has prepared guidelines for political subdivisions to use in applying for funds and, within this relatively unstructured framework, the Director makes judgements on the distribution of funds to counties, municipalities, and school districts. There is an appeal process, however.

A key factor in distributing funds is equivalency of tax burdens. Applicants must demonstrate that taxpayers in the locality will continue to have a tax effort that is comparable to non-energy affected areas.

One peculiarity of the North Dakota approach is its definition of impact. The enabling law itself States that "as used in this section, 'basic governmental services' do not include activities relating to marriage or guidance counseling, services or programs to alleviate other sociological impacts, or services or facilities to meet secondary impacts." This Statement excludes (on paper) a wide range of effects that are elsewhere considered worthy of mitigative attention. A source in the Energy Office says

that this prohibition, however, was designed to avoid jurisdictional (State-local) funding complications and that such programs, directly and indirectly, are supported by the grant program.

Appropriations for the 1977-1979 biennium were $5 million, with $7.9 million requested from communities. In 1979-81 these figures went to $8.2 million and $44 million. For the 1981-83 period, $12 million was planned for coal-impacted areas and $10 million for oil and gas affected communities. Requests from subdivisions equaled $50 million. Nevertheless, appropriation levels fell to $5.0 million for oil and gas and increased to $14.8 million for coal impact in 1983-85. They have fallen to $4.0 million for oil and gas and $9.0 million for coal in the 1985-87 appropriations.

Thus, North Dakota's program - even with Federal matching funds and other sources that local officials must pursue - has been underfunded, at least relative to the expressed needs of affected subdivisions. The positive news, according to a BLM source in the Montana State Office who has worked with planners in North Dakota, is predictability. Compared to Montana, this person States that officials in North Dakota are much more confident about rapid-growth funding than are persons in Montana. This is puzzling, given the gap between appropriations and requests and may say more about the Montana situation than the North Dakota scene.

Utah

Social and economic impact mitigation in Utah is addressed by the Utah Approach - a planning, assessment, and bargaining process. State policy is expressed in Senate Bill 170 which states that the legislature declares its policy:

- to encourage industrial development and the development and utilization of the natural resources in this State in order to promote the economic development of the State . . .
- to encourage cooperation between the State and its agencies and political subdivisions with individuals, firms, and business organizations to provide for industrial development and the development and utilization of the natural resources of the State.

This enabling legislation is operationalized by the Utah State Department of Community and Economic Development. In concept, the role of the State is one of facilitation. This facilitation involves data collection and analysis-forecasting ("common numbers"), assistance in needs assessment of local government units, review of proposals, and insuring collaboration between developers and local officials. Furthermore, the State is committed to "identify mechanisms that will allow industries and local governments to jointly fund, pre-pay, guarantee, receive credits or in other ways assist in financing capital facilities and services."

In large scale synfuels development, the State recommends the creation of a State impact team, a local impact team, an industry impact team, and a Federal impact team. The principal players are local officials and industry. Industrial involvement can be quite formal (the Overthrust Industrial Association in Wyoming is held up as a model) or can be a loose, cooperative

coalition. The former type is encouraged but it is recognized that circumstances may dictate the latter.

Regardless, all of the teams are represented on a Joint Task Force which designs the mitigation approach. This group (1) identifies the anticipated impact (service shortfall), (2) assesses the cost of upgrading the service or program, and (3) recommends strategies to pay for the mitigation scheme. The plan is reviewed by the teams and, if approved, is put into final form. Final plans are recommended to be quite formal, outlining the responsibilities of all parties. The Rio Blanco County-Moon Lake Impact Plan in Colorado is considered a model agreement.

SB 170 enables pre-payment of property taxes (contingent upon approval of local officials) and the preparation of financial impact statements. It obviously does not foreclose other approaches toward solving financing problems such as direct subsidies for capital improvements.

The assessment approach in Utah is also NEPA-like. The Department of Community and Economic Development has prepared an elaborate outline (fifteen pages in length) for the preparation of socioeconomic assessments. It covers the standard list of facilities - services (baseline and future with the action). This assessment is used by the teams in developing the mitigation plan.

BLM in Utah now routinely directs major project assessments to the Department of Community and Economic Development - State Planning Office.

This insures State collaboration in Federal permitting, insures that a unit of government - the State - closer to local units than a Federal agency does the analysis, and deflects some potential disputation away from BLM. This approach was successfully employed on the Uintah Basin Synfuels EIS. This system apparently is agreeable to all parties in Utah.

Wyoming

The permitting of large industrial facilities in Wyoming is handled under the Industrial Development Information and Siting Act (1975, amended in 1977, 1979, 1981, and 1985). This law defines such facilities in terms of production and minimum capitalized investment ($96.9 million in late 1985), creates an Office of Industrial Siting Administration, lays out a decision process, and makes it clear that this legislation supercedes other legislation.

It is a tight piece of work, quite explicit. For example, the numbers of days budgeted for hearings, studies, and decisions are firmly established within the law. There is limited room for interpretation or disputation in a procedural system such as this approach. All actors (State agencies, industry, advocacy groups) know the process.

In terms of social and economic mitigation, the key section of the law is 35-12-108, Application for Permit. This section requires the preparation of a permit application. The application is quite similar to a NEPA document as all sorts of baseline information is presented and future conditions are forecast.

The Office of Industrial Siting Administration has assembled a followup document entitled Guide to the Preparation of Permit Applications for Industrial Facilities. This guide implements the requirement for a permit application by specifying the contents and format of the application.

The application must contain a Social Profile section (Chapter 4) and a Socioeconomic Impacts of Construction and Operation section (Chapter 6). The topics to be covered, in a Baseline and With Action analysis, are:

Current Area Economy
Projected Future Economy
Area Population
Capital Facilities
Administration
Sewage Treatment
Water Treatment
Solid Waste Disposal
Law Enforcement
Fire Protection
Health Care
Recreation
Library
Housing
Transportation
Human Services
Educational Facilities
Government and Public Finance

This is a fairly conventional list. However, in the guidance for preparing Chapter 6, the following statements are found:

> Any mitigating actions proposed by the Applicant to assist the local banking community to better meet the capital needs created by either the construction or operation of the facility should be presented.
>
> The Applicant should identify any measures to be implemented to insure that area capital facilities are not significantly impaired as a result of construction or operation of the proposed facility. The project may necessitate certain mitigative measures that may involve either the private or public sector and may entail temporary or permanent facilities. Mitigative measures in the private sector may consist of direct actions by the Applicant or as a joint venture with local governments or other area industries or groups . . . duration and costs of any alleviation measures, responsible entities, and funding sources should be fully delineated and incorporated into budget projections.
>
> Any measure the Applicant intends to implement to mitigate anticipated impacts on human services should be specified.

There are statements of this type attached to each of the topics (fire, health, housing, education . . .). By directing the Applicant to include this information in the permit application, Wyoming is giving a lot of

leverage to local officials to negotiate, prior to or during application, settlements with the Applicant. Members of the Industrial Siting Council are in a position to withhold a permit at the State level until the firm(s) and local officials have settled on a mitigation-monitoring plan.

A recent (1985) change in the required contents of the application involves the applicant's description of its plan to maximize the employment of Wyoming residents. This amendment does not require the preferential hiring of Wyoming residents but the applicant must include in its application its intentions relative to potential Wyoming employees.

A BLM source in Wyoming states that the major linkage between industrial siting applications and Bureau NEPA documents has been recognition that applications prepared by industry to comply with Wyoming permitting are also adequate for BLM decision processes. Two parallel documents may have to be prepared but, due to the specificity of the permit applications, Wyoming standards are more stringent than the Federal NEPA requirements, at least in social and economic analysis. Of course, compared to Federal coal leasing, the proposed action in a permit application is well-defined, allowing more precision in forecasting.

Chapter VIII

Local Government Approaches

Introduction

City, county, and school board representatives are ultimately responsible for the provision of additional services and facilities that are generated by population growth caused by the siting of major energy or mining facilities. Generally, host communities and their officials rely on State-level programs to facilitate growth management. These State programs as described in Chapter VII typically distribute severance taxes (the Montana Coal Board) or serve to bring host communities together with proponents for negotiated settlements (Wyoming Industrial Siting Council and the Utah Approach).

In Colorado, however, State government does not directly intervene between developers and host communities in achieving these settlements. The Joint Review Process and Cumulative Impacts Task Force programs (discussed in Chapter VII) are essentially devoted to information exchange, efficiency in data collection and analysis, and avoidance of permitting duplication. The fundamentals of designing mitigation programs are maintained as local prerogatives. For example, Garfield County, Colorado, was projected to be the location of several very large synthetic fuels facilities in the late 1970's and early 1980's. In response, the Board of County Commissioners

developed a fiscal impact mitigation program which requires developers to document expected local fiscal effects and, through tax incentives, to directly subsidize those community effects for which they are responsible. As a prototype of such measures, it is presented here as Exhibit 7.

EXHIBIT 7

BOOK 615 PAGE 151

STATE OF COLORADO)
) ss.
County of Garfield)

Recorded at 9:04 o'clock A M. DEC 21 1982
Reception No. 335361 MILDRED ALSDORF, RECORDER

At a regular meeting of the Board of County Commissioners for Garfield County, Colorado, held at the Commissioners' Annex in Glenwood Springs, Colorado, on Monday, the 20th day of December, A.D. 19 82, there were present:

Flaven J. Cerise, Commissioner Chairman
Eugene "Jim" Drinkhouse, Commissioner
Larry Velasquez, Commissioner
Earl Rhodes, County Attorney
Stan Broome, County Manager
Mildred Alsdorf, County Clerk

when the following proceedings, among others were had and done, to wit:

RESOLUTION NO. 82-318

RESOLUTION CONCERNED WITH AMENDING THE GARFIELD COUNTY ZONING RESOLUTION OF 1978 BY THE INCLUSION OF A NEW SECTION 5.08 FISCAL IMPACT MITIGATION PROGRAM

WHEREAS, on the 2nd day of January, 1979, this Board of County Commissioners of Garfield County, Colorado, adopted Resolution No. 79-1, concerning a Zoning Resolution for the County of Garfield, State of Colorado;

WHEREAS, this Board is authorized by the provisions of Sections 30-28-109 through 30-28-116, C.R.S. 1973, as amended, to provide for the approval of amendments to such Zoning Resolution, and the Board has so amended the said Resolution;

WHEREAS, pursuant to such authority, this Board has proposed certain text amendments related to a new Section 5.08 of the Zoning Resolution entitled Fiscal Impact Mitigation Program, which amendment relates to the definitions of major projects, total employment workforce, impact area, Government entity and other related matters; the pre-application administrative procedure for purpose of public notice, a fiscal impact analysis as a precondition to the application for a major project land use application and adoption of a Fiscal Impact Mitigation Program as a condition of a major project Garfield County land use permit;

WHEREAS, this Board has received the written Resolution of the Garfield County Planning Commission approving the adoption of new Section 5.08, which Resolution was adopted after a public meeting held on December 13, 1982, at which time, the public was present and made comments about the adoption of said amendments to the Zoning Resolution;

WHEREAS, a public hearing was held on the 20th day of December, 1982, before the Board of County Commissioners of Garfield County, Colorado, at the Commissioners' Meeting Room, Commissioners' Annex, 201 Eighth Street, Glenwood Springs, Colorado, as to which hearing public notice was given in accordance with requirements of Section 10 of the Garfield County Zoning Resolution;

WHEREAS, the public was at such public hearing, given the opportunity to voice its' opinion regarding the proposed text amendment, which opinions have been given full consideration by this Board; and

WHEREAS, this Board has determined that the proposed text amendments are necessary and are in the best interest of the citizens of Garfield County, Colorado.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Garfield County, Colorado, that the Garfield County Zoning Resolution, adopted by this Board on the 2nd day of January, 1979, and identified as its

Resolution No. 79-1, as subsequently amended by this Board, shall be and hereby is amended as follows, which amendment shall be in full force and effect as of January 1, 1983:

1. Section 1.02 shall be amended to read as follows:

This Resolution is authorized by Title 30, Article 28, and Title 29, Article 20 of the Colorado Revised Statutes, 1973, as amended.

2. That a new section 5.08 shall be added, which shall read as follows:

See Exhibit "A".

Upon motion duly made and seconded the foregoing Resolution was adopted by the following vote:

_____, Aye

_____, Aye

_____, Aye

Commissioners

ATTEST:

Clerk of the Board

BOARD OF COUNTY COMMISSIONERS
OF GARFIELD COUNTY, COLORADO

By: _____
Chairman

STATE OF COLORADO)
County of Garfield) ss.

I, _____, County Clerk and ex-officio Clerk of the Board of County Commissioners in and for the County and State aforesaid do hereby certify that the annexed and foregoing order is truly copied from the Records of the Proceedings of the Board of County Commissioners for said Garfield County, now in my office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at Glenwood Springs, this _____ day of _____, A.D. 19____

County Clerk and ex-officio Clerk of the Board of County Commissioners.

_____

5.08 FISCAL IMPACT MITIGATION PROGRAM

5.08.01 STATEMENT OF PURPOSE AND AUTHORITY

The Board of County Commissioners for the County of Garfield, State of Colorado (hereinafter, the "Board"), supports private activities, including extraction of natural resources, which result in the diversification of the economic base for Garfield County. Economic development increases the local tax base, provides increased employment opportunities, and diversifies the local economy. Through zoning and subdivision controls, the Board has attempted to require developers to pay a fair share of the public costs associated with development. Major Projects, because of their size, require that the Board set forth an express plan by which local government entities can deal with the impact of large scale development. Unless this is done, there may be an unacceptable deterioration in the quality of life for present and future residents of Garfield County.

The purpose of the fiscal impact mitigation program is to condition a land use permit to the sponsor of a Major Project so that the sponsor will participate, as necessary, in a mitigation plan to provide for the timely availability of adequate housing, community facilities and public services during the construction phase of a Major Project. In order to accomplish this, the Board has established a consistent review procedure by which the fiscal impacts on local governments in the impacted area can be determined. The program will be limited in time to that period between the start of construction and the time when construction is complete as specified in Section 5.08.07.10 herein. This is necessary since the Board recognizes that traditional sources of revenue must support the expenditure of funds by local government for the duration of the project.

Garfield County is a political and legal subdivision of the State of Colorado, and pursuant to the Constitution and laws of the State, is authorized to exercise land use authority over the unincorporated areas of Garfield County (Sec. 30-28-102, CRS '73, as amended). The purpose of zoning is to provide for the coordinated, adjusted, and harmonious development of the county (Sec. 107), so that the health, safety, morals, convenience, order, prosperity, or welfare of the present and future inhabitants of the state be increased (Sec. 115). In addition, Article 20, Title 29, CRS '73, as amended, is a broad grant of authority to local governments to plan for the growth of the State. Specifically, Section 29-20-104, CRS'73, as amended, provides in pertinent part:

> each local government within its respective jurisdiction has the authority to plan for and regulate the use of land by:
>
> (e) Regulating the location of activities and developments which may result in significant changes in population density;
> (f) Providing for phased development of services and facilities;
> (g) Regulating the use of land on the basis of the impact thereof on the community or surrounding area.

It is the position of the Board that the welfare of the residents of Garfield County is affected by the quality of life in adjacent impacted areas, and that the grant of authority from the state provides for planning for the effects of projects located inside the county but which affect areas outside of the county's boundaries.

5.08.02 DEFINITIONS

5.08.02.01 BOARD: The Board of County Commissioners of Garfield County, State of Colorado.

5.08.02.02 EMPLOYEE: Any person employed by the Applicant and its construction contractors and subcontractors who is working on a major project in Garfield County.

5.08.02.03 FISCAL IMPACT ANALYSIS: A projection of the direct and indirect public costs and revenues associated with the provision of public services and facilities by government entities in the impact area.

5.08.02.04 GOVERNMENT ENTITY: An organization authorized to levy ad valorem taxes in the State of Colorado.

5.08.02.05 IMPACT AREA: That geographical area which includes any government entity whose total population would be increased by 15% or more as a result of a major project. The base year shall be the same as the year in which the Statement of Intent to Apply is filed.

5.08.02.06 LAND USE PERMIT: A land use permit, for purposes of this Subsection 5.08, shall refer to special and conditional use permits as otherwise defined in this Resolution.

5.08.02.07 LOCAL GOVERNMENT REVENUES: Revenues received by or available to a government entity such as ad valorem taxes, sales, use and severence taxes, service charges and fees, licenses, permits, and grants and inter-governmental assistance programs.

5.08.02.08 MAJOR PROJECT: A project located in Garfield County which will employ at any one time a total work force of 200 or more employees in Garfield County.

5.08.02.09 TOTAL WORK FORCE: Total number of employees on the major project at any one time.

5.08.03 PROGRAM COMPLIANCE REQUIREMENT

All applicants seeking land use permits for Major Projects are subject to the requirements of the Garfield County Fiscal Impact Mitigation Program. In addition to any other requirements of this resolution, applicants for Major Project permits shall prepare and submit the following to the Board, unless granted an exemption from any or all such requirements by the Board:

1. A statement of intent to apply;
2. A pre-application notice;
3. A review fee;
4. A Fiscal Impact Analysis;
5. A Fiscal Impact Mitigation Program;
6. Housing and Fiscal Impact Mitigation monitoring reports following issuance of land use permits.

5.08.04 PRE-APPLICATION ADMINISTRATIVE PROCEDURES

5.08.04.01 STATEMENT OF INTENT TO APPLY

The applicant for a Major Project shall file with the Board a Statement of Intent to Apply for land use permits outlining the substance of the requested permits, the proposed scope of study of the fiscal impact analysis, the timetable for the fiscal impact study and any request for exemption from any requirements of the Pre-application Procedures.

5.08.04.02 EXEMPTIONS FROM PRE-APPLICATION PROCEDURES

A. Any applicant of a Major Project who has elected to coordinate notice of acquisition of project permits through the Colorado Joint Review Process and who has taken steps so that impacted government entities have been notified of such election in advance of the public meetings held as part of the review process may apply for an exemption to the pre-application procedures.

B. Any applicant of a Major Project for which a federal environmental impact statement must be prepared, and who has taken steps so that impacted government entities are given adequate notice of the scoping meetings held with respect to such impact statement may apply for an exemption to the pre-application procedures.

C. The Board will review and act upon the request for exemption from any or all provisions of the Pre-application Procedures within 15 working days of receipt of a complete and adequate Statement of Intent to Apply and request for exemption from the Pre-application Procedures.

5.08.04.03 PRE-APPLICATION NOTICE

A Pre-application Notice for a permit shall be filed with the Board and shall contain the applicant's proposal including the following information:

A. The name and address of the applicant, and, if the applicant is a partnership, association or corporation, the names, titles and addresses of the persons to be contacted regarding the Major Project;
B. Specific description of the nature and location of the Major Project;
C. Estimated time of commencement of construction, construction time, and overall development schedule;
D. Estimated number of employees of the applicant, and contractors and subcontractors of the applicant, during the construction phases, and during the operating life of the Major Project. Estimates may include the number of employees who do not currently reside within the impact area of the Major Project;
E. Identify the government entities and other taxing authorities within the potential impact area;
F. Principal sizing, scheduling, location or other alternatives that the applicant may pursue in the construction, development, and operation of the Major Project; and
G. A list of studies which the applicant intends to submit on the housing and fiscal impacts of the Major Project.

5.08.04.04 PRE-APPLICATION REFERRAL AND PUBLIC NOTICE

Not more than 15 working days following receipt of a Pre-application Notice for a permit, the Board shall:

A. Notify the governing bodies of government entities which will be within the impact area and affected by the proposed Major Project;
B. Transmit a copy of the Pre-application Notice to the affected government entities;
C. Cause a summary of the Pre-application Notice to be published in a newspaper of general circulation within the county;
D. File copies of the Pre-application Notice with the county clerk and recorder; and
E. Notify the applicant of the direct costs associated with the notification and publication of the Pre-application Notice. Such costs shall be paid by the applicant within 30 days of billing.

5.08.04.05 PRE-APPLICATION MEETING

The Board shall conduct a public informational meeting in the county no later than 90 days after receipt of the Pre-application Notice. Any person may participate in the meeting, to the extent deemed reasonable and relevant by the Board. Such meeting shall be conducted in order to accomplish the following purposes:

A. To provide information about the proposed facility and its potential impact area;
B. To receive the concerns of the public and each government entity regarding the potential impact of the proposed Major Project; and
C. To determine the nature and extent of exemptions from any provisions of this program that may be granted to the applicant.

5.08.04.06 PRE-APPLICATION REPORT

As soon as practical, but in any case within 30 days after the conclusion of the pre-application meeting required by this section, the Board shall prepare and make public a report on the Pre-application Notice and meeting. The report shall include:

A. A summary of public and government entities comments;
B. The applicant's proposed scope, approach and schedule for the Fiscal Impact Analysis; and
C. A grant of exemptions, if any, from any provisions of the Fiscal Impact Analysis and Fiscal Impact Mitigation Program procedures.

5.08.05 FISCAL IMPACT ANALYSIS REQUIREMENTS

Prior to submitting an application for a land use permit, any applicant for a Major Project shall prepare a Fiscal Impact Analysis.

5.08.05.01 SCOPE OF ACTIVITIES

Before the applicant commences the Fiscal Impact Analysis, the applicant shall consult with the Board regarding: (1) The scope of the Fiscal Impact Analysis, based on the subjects listed below; (2) The schedule for the study upon which the Fiscal Impact Analysis will be based; and, (3) A schedule for periodic reports to the Board concerning the

study. The following subjects shall be included in the study at a minimum:

1. The location and purpose of the Major Project;
2. Estimated construction schedule;
3. Number of employees for construction and operating work force;
4. Direct and indirect tax bases and revenues associated with the project;
5. Demonstration of consistency with local land use plans;
6. Total direct and indirect population associated with the project, including the rate, distribution, and demographic characteristics of the population change;
7. The direct and indirect effects of construction and operation of the Major Project within the impact area, including but not limited to the following:
   a. Economic base;
   b. County services;
   c. Housing;
   d. Transportation;
   e. Sewer and water facilities;
   f. Solid waste facilities;
   g. Public safety and fire protection;
   h. Educational facilities;
   i. Health services and hospital facilities;
   j. Recreation facilities;
   k. The fiscal impacts of the Major Project on public facilities and services of each government entity in the impact area;

8. Definition of impact areas:

   a. A list of each government entity in the impact area; and
   b. The basis for inclusion or exclusion of each government entity in the impact area.

9. Any other items the Board or the applicant may deem appropriate for inclusion in the Fiscal Impact Analysis.

5.08.05.02 REVIEW FEE

The Board will provide the applicant with an estimate of the fee required to reimburse the County for the cost of investigating, reviewing, processing, and serving notice of the Fiscal Impact Analysis. Payment of the review fee shall be on a reimbursement basis. The applicant shall pay all invoices within 30 days of billing, but may pay under protest pending the results of an independent audit requested and paid for by the applicant. Time and expenses of the County shall be reimbursable. No Fiscal Impact Analysis review fee shall exceed $15,000.00 in total. No portion of the fee may be used for litigation.

5.08.05.03 ADVISORY COMMITTEES

The Board may appoint one or more committees at the request of local government entities to assist in the Board's review of the Fiscal Impact Analysis and to make suggestions concerning the Fiscal Impact Mitigation Program. The Committees may be composed of representatives of government entities in the impact area. The committees may be reimbursed, within the limits of the review fee, for any necessary expenses in the reasonable conduct of the evaluations. The Board shall approve expenses before they are incurred following consultation with the applicant. If

requested by a government entity, the Board may provide technical assistance to the government entity in evaluating the Fiscal Impact Analysis. Any report of an advisory committee shall be submitted to the Garfield County Planning Commission and the Board.

5.08.06 REVIEW OF THE FISCAL IMPACT ANALYSIS

5.08.06.01 REFERRAL AND PUBLIC NOTICE

Upon receipt of a complete Fiscal Impact Analysis for a Major Project, the Board shall:

a. Transmit within 10 working days, a copy of the Fiscal Impact Analysis to each government entity within the impact area;
b. Publish within 15 working days a notice of receipt of the Fiscal Impact Analysis at least one time in a newspaper of general circulation in the County, and utilize any other means of notifying the public that the Board may deem necessary;
c. Make copies of the Fiscal Impact Analysis available for inspection by members of the public; and
d. Refer the Fiscal Impact Analysis to the Garfield County Planning Commission for evaluation and recommendation.

5.08.06.02 PUBLIC COMMENT

Not less than 21 days before the hearing described in Section 5.08.06.03 below, any person or government entity may submit written comments to the Board concerning:

a. The adequacy of the Fiscal Impact Analysis. If the person or government entity shall be of the opinion that the Fiscal Impact Analysis is inadequate, it shall state in writing what additional information is needed for an adequate analysis;
b. Any variance or incongruity with government entity policy, if applicable; and
c. Written comments shall be made available to all parties who request copies prior to the public hearing.

5.08.06.03 PUBLIC HEARING

Within 75, and not less than 45, days after receiving the Fiscal Impact Analysis, the Board shall hold a public hearing to consider the adequacy of the Fiscal Impact Analysis. Notice of the hearing shall be published at least one time in a newspaper of general circulation, and the date of publication shall be at least 15 days before the date of the hearing. The Board shall state the basis for its decision in writing within 30 days of the conclusion of the public hearing with a specific description of any inadequacies that must be corrected.

5.08.07 FISCAL IMPACT MITIGATION PROGRAM

5.08.07.01 APPROVAL OF THE FISCAL IMPACT MITIGATION PROGRAM

The Board shall condition any land use permits issued for a Major Project upon appoval of a Fiscal Impact Mitigation Program based on the following criteria. The Board approval of the Fiscal Impact Mitigation Program shall take place concurrently with the approval of any land use permits for the Major Project.

5.08.07.02 PROVISIONS OF THE FISCAL IMPACT MITIGATION PROGRAM

The applicant shall address the impacts identified in the Fiscal Impact Analysis prepared pursuant to Section 5.08.06 in a mitigation program. The applicant's Fiscal Impact Mitigation program shall include measures to provide that:

a. Housing is available for the employees of the Major Project;
b. Additional public services and facilities including operating costs necessary to mitigate impacts of the Major Project will be provided or available or additional revenues provided or available to each government entity sufficient to mitigate impacts of the Major Project or the impacts created by the employees of the Major Project and their households; and,
c. Any capital costs of construction of new or expanded public facilities necessary for each government entity to provide service required by the Major Project or by the employees of the Major Project and their households are available.

5.08.07.03 DELAY OR ABANDONMENT OF THE MAJOR PROJECT

The applicant shall prepare a plan to mitigate the Fiscal Impacts on each government entity resulting from delay or abandonment of the Major Project after any land use permits are issued by the County.

5.08.07.04 JOINT MITIGATION PROGRAMS

To the extent that two or more Major Projects have concurrent construction periods, the Fiscal Impact Mitigation Program may provide for joint mitigation efforts with another Major Project. The Fiscal Impact Mitigation Program may also recognize the effects of other concurrent or preceding mitigation programs on the need for new and expanded public services and facilities.

5.08.07.05 REIMBURSEMENT FOR IMPACT MITIGATION ACTIVITIES

To the extent that the Fiscal Impact Mitigation Program may result in a greater increase in the capacity of community facilities and public services than necessary to accommodate the direct impacts of the project, the Board may develop requirements that future Major Projects reimburse the applicant for excess capacity available to the future Major Project.

5.08.07.06 FINANCING OF PUBLIC IMPROVEMENTS

The Fiscal Impact Mitigation Program may provide for the use of grants, loans, loan guarantees, bond guarantees, industrial revenue bonds, a build-and-lease approach, or any other financing mechanisms or combination of mechanisms which are appropriate for the specific facility or service.

5.08.07.07 TAX INCENTIVES

Government entities and the applicant may enter into appropriate agreements providing for prepayments of property taxes pursuant to Article 1.5 of Title 39, CRS '73, as amended, severence tax credits pursuant to Section 39-29-107.5, CRS '73, as amended, or other incentives enacted at the state or local level. Government entities may also enter into intergovernmental agreements necessary to implement the Fiscal Impact Mitigation Program.

5.08.07.08 LOCAL GOVERNMENT PARTICIPATION

The Board recognizes that effective and workable mitigation programs require the full and cooperative efforts of both industry and local government. In this regard the Board may actively participate and encourage other affected jurisdictions to participate and cooperate in implementing recommended mitigation programs when appropriate, especially where such programs call for specific actions to be taken by such affected jurisdictions.

5.08.07.09 PHASING OF THE FISCAL IMPACT MITIGATION PROGRAM

To the extent that the project involves phases of construction over time, the Fiscal Impact Mitigation Program may also be phased so that the timing of program by the applicant and other elements of the program for mitigation impact shall correspond to the phases of construction activity. If such program is phased and a governmental entity's costs change, the program shall be changed by a proportional amount.

5.08.07.10 PROGRAM EXPIRATION

The Impact Mitigation Program shall be deemed to satisfy the housing and fiscal impact mitigation conditions of the land use permits issued for the Major Project when the construction of the Major Project is complete. This requirement of impact mitigation shall be deemed complete as of the last day of the calendar year in which construction is finished. Also, the applicant shall have the right to demonstrate to the Board that local government revenues from the project exceed the applicant's costs of the Fiscal Impact Mitigation Program prior to completion of construction.

5.08.08 FISCAL IMPACT MITIGATION PROGRAM COMPLIANCE

5.08.08.01 ANNUAL FISCAL IMPACT MITIGATION PROGRAM REPORTING

The Major Project sponsor shall annually report to the Board on the provision and availability of additional public services and facilities or revenues to each government entity as required by the Impact Mitigation Program approved by the Board.

5.08.08.02 MONITORING

As a condition of the land use permits, the project sponsor shall be required to develop and implement an ongoing housing and employment monitoring system. If the total workforce significantly exceeds the employment force which was projected at the time of permit issuance, the Major Project sponsor shall be required to notify the Board of the effects of the increased workforce on the approved mitigation program, any additional measures needed to accommodate the workforce, and any additional steps the sponsor shall take to mitigate the fiscal or housing impacts in the impact area.

5.08.08.03 FISCAL IMPACT MITIGATION PROGRAM ADJUSTMENT

Upon a 10% or greater variance in average total work force from what was projected at the time of permit issuance, the Board may adjust the Impact Mitigation Program in proportion to the difference in projected to actual work force. At the time of issuance of the decision on the land use permit, the Board shall determine whether the variance

5.08.09 SUPPLEMENTAL MAJOR PROJECT LAND USE APPLICATION REQUIREMENTS

5.08.09.01 SUBMITTAL REQUIREMENTS

A. The applicant shall file copies of the application with the Board, the number to be determined by the Board.
B. Maps, charts, or other documents which are bound in the application shall be cut or folded to 8 1/2 inch by 11 inch size. Maps, drawings, or charts may accompany an application as separate exhibits.
C. The application shall be signed by a managing partner, the proprietor, or a responsible executive.
D. As part of the application, the applicant shall submit an objective summary of the entire application, not to exceed 30 pages in length.
E. Whenever this program requires information concerning the Major Project to be submitted to the Board and the applicant is required to submit the same or similar information to another governmental agency having jurisdiction, the applicant may submit such information to the Board in the same format that such information is or will be submitted to such other agency or jurisdiction.
F. The application shall contain the following information with respect to both the construction period and on-line life of the proposed facility:
1. The application shall state the name, title, telephone number and post office address of the person to whom communication in regards to the application shall be made.
2. Copies of the Fiscal Impact Analysis.
3. The proposed Fiscal Impact Mitigation Program.

5.08.09.02 APPLICABILITY

Upon agreement between the applicant and the Board, any pending land use application for a Major Project shall be subject to the provisions of these regulations. All time limits in this Section 5.08 are in addition to any other provided for in this Zoning Resolution.

5.08.10 MAJOR PROJECT LAND USE PERMIT DECISION

Within 30 days after the conclusion of the public hearings, on the land use permit, the Board shall make findings upon all issues raised during the review and hearing process and render its decision, either granting or denying a land use permit based upon the application as filed or granting it upon such terms, conditions, or modifications as the Board may deem appropriate.

5.08.11 ENFORCEMENT

The above mitigation program as outlined in Section 5.08.07 shall be a condition of the issuance of the land use permit for the project.

Upon being advised of an alleged violation of any condition of any permit issued by or on behalf of the Board, the Board may direct the County staff to investigate the alleged violation and prepare a written report for the Board and the permittee. If the report indicates that a violation is probable, the Board may establish a time for consideration of the alleged violation, upon not less than ten (10) days notice to the party engaging in the activity

under such permit, at which hearing the Board may consider whether a violation of the conditions of the permit has occured. The major project permittee shall have the right of discovery in accordance with Colorado rules of civil procedures in such proceedings, and to present information and respond to allegations. After the hearing, if the Board determines that a violation has occurred, the Board may suspend the permit until such violation is corrected or measures taken to prevent a recurrence of the violation, or if the violation is determined to be continuing or likely to recur and to endanger the safety or welfare of the residents or property of residents in the County, the Board may terminate the subject permit.

Chapter IX

The Private Sector and Community Mitigation

Introduction

Industry participation in community mitigation has been extensive and has taken a variety of forms over the past several years. These efforts have been direct and indirect, voluntary and required, and internalized and directed toward host communities.

Such programs clearly represent a positive corporate posture relative to dealing with the effects of industrial sitings near small and medium-sized towns in the West. This may be largely due to the widespread growth and disruptions that were publicized during the 1970s, along with decisions to minimize labor turnover problems that occurred in some locations. Several States also reacted, developing processes to insure that vulnerable communities were given State government backing in order to enhance their position in dealing with project proponents.

Independent of the various reasons, the standards that apply to industrial sitings have generally moved toward a much more responsive corporate position on community mitigation. While there definitely are differences in corporate personalities - ranging from conservative, closed organizations to

firms that are open and flexible - there is little doubt that virtually all development firms now appreciate that some form of assistance is part of the entire siting process.

In the following paper (Exhibit 8), Bill Metz of Argonne National Laboratory thoroughly inventories corporate socioeconomic programs. Covering transportation, housing, education, utilities, health, public safety, recreation, and other services and facilities that may be stressed by rapid growth, this paper is probably the best overall summary of corporate activities in mitigation that has been prepared.

For persons affiliated with Federal and State government agencies, this presentation may reveal a magnitude of private sector funding and participation that heretofore has received limited attention among public sector personnel. Yet project developers are doubtless the major actors, along with host community officials, in the resolution of community impact problems. Either through non-routine interventions such as those described here or through payment of severance taxes, property taxes, royalties, and other more well-established mechanisms, eventually funding for growth management and response is largely based on corporate activities. While the bulk of this Reference Guide is devoted to government processes, it should be understood that proponents are essential and central participants.

Reprinted with permission of the author
from proceedings of the Alaska Symposium
on Social, Economic, and Cultural Impacts
of Natural Resource Development; Alaska
Pacific University; Anchorage, Alaska;
August, 1982

Industry Initiatives in Impact Mitigation

William C. Metz

The mitigation of socioeconomic impacts, potential and actual, in local areas hosting the development and operation phases of a natural resource extraction and/or conversion facility is an inexact science. Conflicting opinions abound among companies, communities, consultants, experts, and state and federal government officials regarding level and type of responsibility, strategy, and effort appropriate for each new resource development. Mitigation is maturing; as more examples of mitigation efforts and their success/failure, cost, workforce effects, and project implications come to light, then a data base for analysis on mitigation efforts can be supported. Continued emphasis must be given to the fact that mitigation needs are different for each locale due to project and area uniqueness.

Attempting to determine the proper mix and optimum effort with regard to mitigation on the basis of a cost/benefit formula is haphazard at best. Industry can estimate the cost of each 1% of turnover and absenteeism (on a $1 billion project where labor accounts for 40% of a project's cost it means a $1 million loss), each day of delay for a project (over $1 million a day for a multi-billion project, including interest, contract extension penalties, and inflation), each episode of vandalism or labor strife, each percent loss of productivity or incident of management error, as well as the benefit for each reduction in percent or incident in the aforementioned. Equating the value to a project of, for example, a mancamp, transportation program, or school upgrade with either single or double rooms, used or new buses, or a new athletic field or whole new $2 million school building, respectively, with all the variations, is difficult at best.

As local, regional, state, and federal governments have become more aware of industry-wide mitigation efforts, industry fears that at each succeeding new development they will be confronted with shopping lists gleaned from efforts with other projects - "we" want one ladder truck, one ambulance, one elementary school, one community center, five playgrounds, a new road, two road resurfacings, a new sewage treatment facility, a new water tank, and housing for the elderly. A second fear is that company-sponsored mancamp, recreational vehicle (RV), and mobile home (MH) facilities and parks will become expected mitigation efforts by both workers and communities at every project. Mitigation should not be considered a windfall of free gifts or a chance to have community facilities fixed or upgraded at a company's expense. It should be considered as a joint company/community/state effort to fulfill impact area needs, to enhance an area's quality of life, to be an asset in workforce recruitment and productivity, to relieve an impact area from undue physical and fiscal burden as a consequence of workforce and sometimes secondary immigration, to be a good neighbor, and to secure necessary permits. Companies and communities need to work together in good faith, give adequate consideration to each party's limitations, desires, and financial capabilities, and negotiate a compromise of everyone's needs and concerns.

In order to achieve the most efficient and effective mitigation, careful review of local and state laws and ordinances regarding the collection and distribution of lease payments, royalties, severance taxes, fee permits, special use and service charges, and sales taxes is necessary. Adequate and timely disbursement is essential, as well as the innovative use of tax pre-payments, housing mortgage bonds, changeable debt and bonding limits, industrial loans with delayed repayments, and revised revenue assistance formulas. Permitting changes are necessary so that permits are not granted solely by states or

the host political jurisdiction, but in concert with the impact area. States need to enact enabling legislation allowing an impact area to be involved in permits and assessments of mitigation needs. Local communities are often in need of state or industry supplied technical assistance, ombudsmen, and grantsmen to prepare for change through adjustments in ordinances and growth plans and to have sufficient time and knowledge to apply for state and federal money.

A new facet to industry involvement in mitigation is taking place during these present "bust" times in the uranium, copper, silver, zinc, iron ore, molybdenum, and oil shale industries. While many communities have boomed and busted throughout American history with industries offering little assistance, this time around industries which enticed workers to relocate to remote locations during the "boom" are assessing their level of responsibility to those workers during the "bust" in these one-industry communities. This "bust" period is also changing industry and worker attitudes toward relocation inducements and will shape mitigation efforts during future developments of natural resources. Some states (Colorado, Wyoming, Montana, North Dakota, and New Mexico) have established permanent trust funds to aid communities and the state after natural resource depletion; others have or are considering plant/mine closure legislation (similar to Maine's requiring six months notice prior to closure), payment of severance pay, and donation of assistance funds for the impacted communities.

The following is a panoply of mitigative efforts which have been or are being undertaken by natural resource companies. Examples of mitigative efforts have been culled from periodicals (e.g., *Shale Country, Coal Age*, and *Engineering News-Record*), newspapers (e.g., *High Country News, New York Times, Denver Post, Daily Sentinel*, and *Idaho Falls Post-Register*), industry publications (e.g., ArcoSpark, Conoco, Exxon USA, and Coronado Generating Station), industry reports (e.g., Intermountain Power Project Socioeconomic Impact Mitigation Plan, Bonanza Power Plant Project Socio-Economic Impact Monitoring Report #1, and Tennessee Valley Authority Socioeconomic Monitoring and Mitigation Reports), state reports (e.g., Wyoming Industrial Siting Council Agreements and State of Colorado, Division of Impact Assistance, Assembled Materials), federal documents (e.g., Environmental Impact Statements and DOE, BLM, and USGS reports), literature (e.g., articles, books, proceedings, and speeches), and a personal and professional network of local, state, and industry contacts. The mitigation efforts described herein are not all inclusive and a few efforts have been halted or postponed as their sponsoring companies have closed, slowed, or postponed their respective resource development projects. Each mitigation effort is the result of a particular set of circumstances (site accessibility, labor availability, area accommodation, permit requirements, company experience, project timeframe, and community/impact area attitudes and fiscal conditions). Some mitigation actions may work for one company's development area and not at another's; some companies may not even try certain mitigation actions. The following is a review of seven types of mitigation efforts: 1) transportation; 2) housing; 3) education; 4) public utilities; 5) health, public safety, and recreation; 6) miscellaneous; and 7) company-community interaction.

Transportation. In an April 1981 survey of United States energy projects which this author undertook, twenty-four energy companies were found to be involved with or in the serious planning stages for worker transportation programs at forty-two energy project sites (power plants, coal and uranium mines, and oil shale facilities) (Metz, 1982). Other natural resource companies also are involved in transportation (Denver Research Institute, 1978 and 1979). Companies use buses, vans, and bus/van combinations; almost half of the companies in the author's survey offer free transportation to workers, the majority of the companies sought nominal fares to complete cost recovery. The company-sponsored transportation programs purport to conserve energy, reduce area traffic, aid hiring and expand the available number of potential workers, ensure competitiveness with nearby projects, encourage punctuality, reduce absenteeism and turnover, improve a worker's safety and productivity, address union and employee demands, solve parking problems, improve employee morale, serve as a negotiated worker benefit and as a corporate philanthropic gesture, meet state/local permitting concerns, mitigate community resistance to a project, and be cost effective.

The very first decision which a company must make at a project site regarding the initiation of a worker transportation program is whether the company needs to become involved. Long commuting distances and/or times combined with poor quality access roads, as at Rocky Mountain Energy's (RME) Wyoming Bear Creek Mine, weather discomforts, such as the hot summer temperatures at the Arizona Public Service (APS) Palo Verde site, fogs and black ice, around the Washington Water Power Creston

site, inclement winter weather, in the Colorado West Slope area, traffic hazards, such as wild deer and antelope, make the need apparent. Physical site inability or company unwillingness ($500 for each temporary parking space and $100 annual maintenance) to provide adequate parking can create a need. Influencing worker relocation to or from community (to Wright and Gillette, away from Douglas, Wyoming) can be achieved through a transportation program. Programs can be initiated as a recruitment tool or to counter area company-sponsored programs as are prevalent in the Rock Springs-Green River and Gillette areas of Wyoming and the Colorado West Slope. Some state vehicle liability and insurance laws curtail employee ridesharing efforts, causing industry to provide remedies. Almost two dozen energy and A/E companies have corporate ridesharing programs and due to the corporate policy of fostering ridesharing they quickly spread to rural resource developments. Employee problems (late arrivals, travel strain, injury, and commuting costs) have, on occasion, been considered of sufficient magnitude to warrant a program. Unions and worker organizations have also become more aware of this benefit and are bargaining for it. A need for a transportation program, though, can be diminished at any point in time as a consequence of company-caused efforts or independent events, such as changes involving state or local vehicle or insurance regulations, housing accommodations, community infrastructure, construction schedules, labor availability, federal or state grant or loan funding, private enterprise initiative, per diem payments, or community mitigation efforts.

If the need dictates a worker transportation program, then four factors pertaining to the mode of transport need to be analyzed - vehicle type, size, interior, and cost. Vans are flexible, able to collect small clusters of workers living in widely dispersed locations, while buses operate best when transporting a large number of workers long distances. Vans come in 12 to 15-seat capacities, buses can seat 18 to 56. Vehicle interiors range from lean to deluxe (air-conditioning, stereos, cloth seats, reading lights, adjustable backs, carpeting, panelling, and restrooms). Costs range from $9,000 to $14,000 for a new van and $35,000 to $140,000 for new buses, with used and leased vehicles as possibilities.

When determining the mode of transportation, parallel consideration must be given to six operating factors: 1) operator - should these jobs be handled in-house or partially or wholly contracted out?; 2) responsibilities - do the workers, drivers, contractors, or project management make decisions on pickup locations, passenger assignments, parking, rules, and routes?; 3) worker schedules - can adjustments be made among shifts and workers?; 4) rules - do the company, passengers, or contractors create and enforce them?; 5) maintenance - should this be handled at the site by company or contractor, off-site on employee's time, or by contractor?; and 6) drivers - are they professionals, project employees, or company employees hired by a contractor?.

Companies have varying attitudes toward the expense of transporting workers as well as expectations of cost recoupment. The 1981 per mile cost of a van program from company experience was estimated to range from a low of around $0.35/mile to a high of possible $0.60/per mile; for 600 riders using 75 vans (5 spares) averaging 73 miles per day an annual cost range of $500,000 to $850,000 is probable. Per mile 1981 bus costs were estimated to range from a low $1.30 to an approximate high of $2.50; for 600 workers using 15 buses (2 spares) averaging 73 miles per day an annual cost of $500,000 to $2,250,000 is probable. Multiple trips per day by each vehicle could reduce costs (Metz, 1981).

Industries have also become involved in other aspects of transportation including road construction and maintenance, traffic congestion, and airports. Some impacted communities have applied for state or federal funds to either fully or jointly fund many transportation network improvements.

In supporting concern over new roads and improving existing roads, resource companies have made both monetary and labor and materials contribution. Intermountain Power Agency (IPA) has funded a $46,000 traffic study of Millard County, Utah. Rio Blanco Oil Shale (RBOSC) has contributed $300,000 for the study and design of a new Colorado county road. Union, Multi-Minerals, Colony, RBOSC, Cathedral Bluffs, and Gulf Minerals have been involved in new by-passes for the communities of San Mateo, New Mexico, Parachute, Colorado, and Rifle, Colorado. Western Fuels Utah has agreed to $2.4 million to connect the isolated town of Scotia, Utah, with communities to the west. Deseret Generation and Transmission (DG&T) is reimbursing Uintah County, Utah, for new road construction. Utah Fuel prepaid sales and use tax of $7 million to have the State of Utah construct a 13.5 mile highway. Texasgulf and Western Fuels have committed $1 and $1.0 million, respectively, to developing mine access roads in New Mexico and Colorado. In improving and maintaining existing roadways, companies such as Washington Public Supply System (WPPSS) have made payments to a dozen Washington communities near two nuclear sites totalling $20 million and Colowyo matched state funds to improve

three Colorado West Slope bridges. RBOSC and Multi-Mineral paid for Rio Blanco County's (Colorado) Piceance Road repairs. North Antelope Coal is to widen and improve nine miles of Campbell County, Wyoming, road. Anaconda and Colowyo have graveled roads near their mine sites in New Mexico and Colorado, respectively. IPA will be paying for improvements to Millard Country's Bruck-Wellman Road, Kerr-McGee has provided materials for bridge and cattle guard construction in New Mexico, and several other companies have helped in similar efforts, as well as the provision landfill, engineering services and surveys.

In order to reduce traffic congestion resulting from worker ingress and egress at a site, companies have sponsored numerous traffic control studies. Companies have proposed staggering the arrival and departure times of various segments of their workforces, as well as readjusting their entire project's shift schedules on a seasonal or year-round basis so as not to compound area recreational, industrial, other resource project, special event, or commercial traffic. Other decongestion efforts involve installing new traffic lights, special routing of access roads, designating specific local roads off-limits to workers, hiring traffic policemen, and suggesting alternate routes to workers. Resource companies have also been assisting some communities which straddle railroad tracks and are effectively cut in two during the passage of mile-long trains as was the case in Gillette where Burlington Northern, State of Wyoming, Campbell County, and City of Gillette all contributed one-quarter of the cost of an overpass.

Natural resource companies, especially those situated in remote locations, are becoming more involved with airports. IPA assisted Millard County both in applying for funds from the Airport Users Trust Fund, administered by the Federal Aviation Administration, and by contributing $42,000 itself to the County airport studies. Missouri Basin Power Project (MBPP) contributed to the cost of improving the Wheatland, Wyoming, airport through a $50,000 grant. Portland General Electric (PGE) agreed to front-end Arlington, Oregon, airport improvements in exchange for a 25-year waiver of landing fees. Western Nuclear and other companies in isolated locations sometimes put in their own airstrips or helicopter pads.

One entirely unique company involvement in worker transportation would have been Colony's proposed $10 million gondola system to carry workers 1.2 miles and 1800 feet in elevation to the oil shale work site on the Colorado West Slope.

Housing. Housing initiatives by industries during the past decade have met with success and failure. Some of the praise/blame can be attributed to company management and staff decisions and non-decisions, consultants, regulator inputs, economic exigencies, field implementation, and a combination of initiative and experience, or the lack thereof. Before committing itself to a housing initiative, a company should review the following eight decision points: 1) housing functions - is the housing to supplement, stimulate, or create area housing and is the need temporary, permanent, or transitional?; 2) housing users - are inhabitants to be single workers, workers and their families, general public or special population segment, or a mix of project and non-project families?; 3) housing type and quantity needs - need to determine number of units, types (bachelor, MH, RV, single-family, and multi-family), and ratio, transitional capability, permanency, and whether of an adequate, marginal, or showplace quality?; 4) monetary expectations - is a profit, breakeven, or a loss expected and is the involvement to be balanced against project worker, schedule, or profit benefits?; 5) role of industry - how visible and how involved in the stimulation or supply of housing and worker financing should a company be?; 6) housing unit location - is the housing to be a separate entity, an expansion or extension of a community, within or outside corporate limits, or facility adjacent?; 7) responsibilities after housing is completed - at what point will a company divest itself of any obligations to the housing or its control?; and 8) amenities and community sharing - to what extent will a company develop housing and community quality of life amenities, co-fund community facilities and infrastructure, or share its housing project amenities with a community?.

Industry housing ventures can be separated into two types of initiatives: first, direct supply of housing units and second, stimulation of housing units utilizing indirect techniques. The direct supply of housing offers the greater range of initiatives and control over timing, location, type, quality, and cost of housing, but increases the responsibility.

Recent housing supply initiatives by natural resource extraction and conversion industries can be divided into four major categories: 1) new towns and rebuilt existing towns; 2) temporary housing; 3) permanent subdivision development; and 4) housing assortments.

1) New towns and rebuilt existing towns - during the past decade five large new towns have either

been initiated or planned by resource companies: Atlantic Richfield's (ARCO) Wright, Wyoming; Plateau Resource's Ticaboo, Utah: Southern California Edison's Kaiparowits, Utah; Island Creeks' Buchanshire, Virginia: and Colony's Battlement Mesa, Colorado. A private developer is building Spring Creek near NERCO's Montana coal mine. Western Energy bought and rebuilt the town of Colstrip, Montana. The plans for these new towns and rebuilt existing towns differ from the "company towns" of the past in terms of ownership, quality, resident consideration, and style. They are all contemporary masterplanned, quality communities designed in a deliberate, highly flexible style of separate residential sections surrounded by open space (green belts and "pocket parks"). Variable housing and growth rates are taken into consideration, as well as environmental harmony (Metz, 1977).

The present generation of new town development differs from the housing efforts of the uranium industry in the 1950s and 1900s, a strategic necessity for the isolated mines. Two towns, Western Nuclear's Jeffrey City and Pathfinder Mine's Shirley Basin, and two villages situated at Federal-American Partner's (FAP) and Pathfinder's Gas Hills mines, Wyoming, and two villages at Anaconda's mine and mill near Grants, New Mexico, are unincorporated, company subsidized, and company-owned housing efforts. The two Gas Hills' villages have recently been demolished and similar plans are in the offing for Anaconda's. There are still numerous examples of company towns, built during the late 1800s and early 1900s, which are in operation today (Allen, 1960).

2) Temporary housing - Temporary housing is needed during construction both to attract and retain quality workers and lessen community impacts. Industry provisions of temporary housing is due to: the increased cost of mortgage money which means more commuting by construction workers due to an inability to buy and sell homes readily; skilled workers are more selective in choosing projects with quality housing and recreation facilities; workers, on the average, are better educated and less tolerant of disagreeable conditions; proven reduction in absenteeism and turnover; community resistance can sometimes be defused by easing the effects of worker relocation in an area. Temporary housing also reduces the number of secondary workers and accompanying families. In short, it can be extremely cost effective. Of course, an involvement in temporary housing need not be made if worker relocation is balanced among several communities, a worker transportation program is initiated, successful private housing ventures properly timed, and other local recruitment, training programs, and schedule adjustment efforts attempted (Metz, 1981).

Temporary housing can be divided into three categories: single-worker or mancamp; recreational vehicle (RV) park; and mobile home (MH) park. Often RV parks are built in conjunction with a mancamp or MH park. Variations in quality and operation can be attributed to location, terrain, weather, project management attitudes, level of labor competition, facility management, and community pressure.

Temporary single-worker housing or mancamps are generally modular in construction and appear evenly split with regard to location, at a project site or adjacent to a local community. Approximately a dozen mancamps are in operation at the present time. Mancamps vary with regard to layout, unit exterior and interior quality, housekeeping services, food selections, accommodations (number of workers per room, room site, bathroom facilities, and furnishings), recreational choices, and landscaping. It has been noted that the better the camp housing, recreation, and services, the lower the incidences of vandalism and rowdyism, worker turnover, and worker/management confrontation. APS, having had numerous worker problems at a low quality mancamp at its Cholla plant construction site, is committing around $7 million to its "man-hotel" at the new Palo Verde site. Union Oil's deluxe mancamp was built to compete with other planned Colorado West Slope oil shale mancamps. Average mancamps cost between $10,000 and $14,000 per worker, the more elaborate mancamps costing up to $18,000 a worker. Workers usually pay a small, heavily subsidized weekly room and board fee which ultimately could be dropped as competition for workers increases (Metz, 1981).

Recreational Vehicle parks have been becoming more attractive and better planned as an increasing number of families accompany workers to project sites. Vehicle pads and roads are being paved, all utilities placed underground, and parks landscaped. Recreation, shower, bathroom, and laundry facilities are included: the level of amenities is the major cost factor - $3,000 to $4,500 per pad. RV parks are often built adjacent to mancamps or temporarily placed in MH parks. The vehicle mix at RV parks is leaning more toward the large travel homes than the truck or camper trailer (Metz, 1981).

Mobile Homes are a necessary housing unit at most remote construction sites. They provide cheap, temporary housing for construction worker families. Worker or project-owned MHs are usually placed

in one of three locations: combination RV/MH parks; private MH parks; or project-developed MH parks. Each park can be planned to fulfill the short-term needs of the construction boom phase and then be dismantled or allowed to remain as a permanent MH park for long-term area housing needs or have its infrastructure used for permanent housing. The vast majority of MH parks are permanent subdivision developments.

3) Permanent subdivision development - Dozens of natural resource companies have been involved in the development or planning of permanent subdivisions. A majority of the subdivisions have been located within community corporate limits, sometimes as far away as 25 miles from the associated energy facility. These subdivisions vary in housing type and can accommodate from a dozen families to several thousand residents. They can be created to contain only employees and their families, possibly some service personnel or public employees, or a mixture of employees and nonemployees. In a few rare instances, as at ARCO's Killarney subdivision in Gillette, no company employee might choose to live in the housing. Company ownership can be maintained for long periods or phased-out quickly and the quality of life can vary. There are essentially three categories of subdivisions: 1) a MH park; 2) a MH park that is adaptable to single-family development; and 3) a single family and/or multi-family development.

MH parks are being built by resource companies such as Peabody Coal, Pacific Power and Light (PP&L), MAX, Utah International (UII), Pathfinder, Allied, AMOCO, Salt River Project, Occidental Oil Shale (Oxy), Eastern Associated Coal, Cyprus, Chevron, Kerr-McGee, and Virginia Electric Power (VEP) for three reasons: 1) the flexibility which a park offers in rapid development, expansion, and contraction; 2) because workers can finance MHs easier than single-family residences; and 3) the ability of a MH park to accommodate RVs temporarily. MHs are the first housing investment of many young miners and construction workers. They offer an easy mode of housing relocation for continually moving construction workers. In many rapid growth areas where labor and material shortages are common in the housing sector, they supply a necessary initial housing response. Park quality can vary dramatically depending upon layout, road paving, spacing, and presence of concrete pads, sidewalks, street lights, recreational areas, dust and dirt, and convenants (e.g., trailer skirts, no animals, no litter, or no external structures), and pad costs range from $7,500 to $12,000 each. One problem has been the buildup of expectations among the first residents of a park about the ultimate quality of the proposed park with eventual disappointment due to unfulfilled company promises caused by project or community changes. In a few cases, companies have overreacted too positively to resident amenity demands, but the risk of overbuilding is usually a lesser evil than that of underbuilding park amenities. Often trailer pad rental fees are subsidized, sometimes services and utilities are not charged to the renters (Metz, 1979).

Adjustable MH parks which are convertible into single-family home developments have been constructed by Colorado-Ute in Colorado and MBPP in Wyoming, one each. Both subdivisions accommodated approximately 500 mobile homes, costing $5 and $8 million, respectively, and will be converted to 250 single-family home lots. A temporary zoning variance was secured for the Colorado park and variance extension was provided by the City of Craig, at its own request, due to a continued need for the MH park. This transitional form of housing accommodation was done in recognition of the large housing need of peak construction years which was followed by a lessened demand for MH parks and a greater demand for more permanent housing.

Natural resource companies have actively sponsored close to two dozen new single-family and/or multi-family subdivisions during the past decade. Energy Development, Pathfinder PP&L, Union, Eastern, Cyprus, Oxy, Texasgulf, Western Fuels, Allied, Anaconda, Kemmerer, FMC, RME, IPA, Ideal Basics, Upland Industries, SUNDECO, ARCO, Carter, UII, Cordero, DG&T, Island Creek, Mid-Continent, and PGE have at a minimum purchased the land, planned the subdivision, performed the engineering, and had the infrastructure (i.e., water and sewer lines, electric and telephone lines, and streets) installed prior to a controlled lot sale or unit construction by the company. Western Fuels and IPA are becoming involved with "in-filling" in Rangely and Delta, Utah, companies purchase lots scattered within communities and construct single- and multi-family housing units on those lots. Resource companies have been entering into single-family and multi-family housing because of a recognized need and each has a different expectation with respect to their investment recoupment. Companies differ in their opinions of employee/non-employee purchasers/renters of this housing. The Wyoming Industrial Siting Council is now requiring more than just the construction of single-family housing as a

mitigation measure: it is also requesting a plan detailing how a respective company will assist its employees in acquiring that housing. The acquisition of housing by employees had been receiving increased company attention for the past several years as interest rates have risen and local banks have refused to enter the mortgage area to any large degree (Metz, in press).

For success in any subdivision development, companies must be careful to select a style acceptable to prospective inhabitants. Special consideration must be given to the access, landscaping, storage space, builder-owner relationship, surrounding land use, matching the purchase price to employee salary levels and fiscal attitude, and developing fiscal incentive. Most companies prefer not to become long-term landlords of rental properties because they have no corporate interest in housing, little experience unless through an existing housing subsidiary, and recognize the daily aggravation of housing management.

4) Assortment - Instead of subdivisions of just single- and multi-family manufactured or stick-built permanent housing some companies have created "assorted" subdivisions containing several of the following: RV spaces, MH pads, single-family, multi-family, and bachelor quarters. Most of the temporary housing is slowly phased into the more permanent housing, though some space is set aside for continued MH and/or RV use. Phillips, Gulf, ARCO, Basin Electric, IPA, Chevron, and FMC with their assorted housing developments face the problems of internal spacing, unit mix, separation, and flexibility of new towns, as well as the added concern of meshing the subdivision, sometimes larger than the adjacent community, into that community. Texasgulf, Allied, Union, and Oxy have taken the tack of developing separate subdivisions in their impact areas for MH and RV units and permanent single-/multi-family housing. In the large assorted subdivisions determinations have to be made regarding the independence of the subdivision and the degree of county/community facility use.

Many companies prefer to stimulate the private sector to build new housing in a project area rather than to undertake the housing expansion effort themselves directly. Stimulation efforts can include: land gifts or subsidized land sale, rental or purchase guarantees, providing collateral or the cosigning of a developer's mortgage, granting housing subsidies, providing technical assistance, helping to arrange for sewer and water lines to a developer's boundary, offering land acquisition assistance, the actual development of a subdivision's infrastructure prior to lot sale, placing money in a local bank for use as a mortgage stimulus, and devising a method by which employees can secure low interest or forgiveness down payment loans or company-sponsored mortgages or mortgage differentials. The ability to stimulate housing depends upon the capabilities of the local builders and entrepreneurs, willingness of industry to forfeit a large measure of control, and a capacity to arrange terms acceptable to corporate/project management. Western Fuels contributed $522,000 to Rangely, Colorado, so that 107 acres of BLM land would be purchased and annexed for housing and commercial development; Western Fuels bought 40 acres for its 288-unit housing development and 1.5 acres for office space. Union assisted Parachute, IPA assisted Delta, Gulf assisted Grants, and Anaconda assisted Tonopah, Nevada, in annexing their housing sites.

Examples of stimulation are numerous. For instance, Beth-Elkhorn Coal conveyed 006 acres of Kentucky land valued at approximately $160,000 to a non-profit home building corporation for $2,000, while Eastover Mining in West Virginia donated a former coal company town and land to a non-profit group for housing development. Carter has purchased and agreed to allow Gillette to annex 240 acres when it is needed for housing. PP&L has joined with several other area resource companies to cover the costs of providing sewer and water system connections to developer's boundaries. Tennessee Valley Authority (TVA) has both had its staff assist several private MH park developers design their parks and given a grant to Hartsville, Tennessee, to provide an access road and sewer/water connection to the boundaries of several developers. Westmoreland Coal provided a $100,000 interest-free loan to cover site engineering costs. Phillips, Anaconda, TVA, DG&T, Salt River Project, APS, and others have guaranteed a certain percent occupancy for a fixed number of years at area MH parks to stimulate their development. Oxy signed master leases with Rifle apartment developers to generate additional apartment construction. W.R. Grace provided collateral at a local bank for a local developer's 492-unit housing project in Craig, Colorado. RME guaranteed the purchase of 45-single family homes in Hanna, Wyoming, allowing the developer to schedule work and purchase in bulk, with company employees being given a 5% discount on their purchase. Kerr-McGee made a down payment loan of $5,000 to employees purchasing homes only in the new town of Wright, Wyoming, plus a gift of $1,500 at closing and an additional $1,000 for the first and second years, followed by proceeds with a seven year

forgiveness loan contingent upon continued employment. In order to boost housing construction during these periods of high interest rates and construction financing shortages, ARCO has purchased 14 new homes and financed 19 to be built in Wright for resale or rental to employees. Seven coal companies and the United Mine Workers formed the non-profit Coalfield Housing Corporation in 1970 to identify and obtain suitable housing development sites in West Virginia and to attract private developers/lenders to create the housing. Numerous companies have made monetary or service contributions to improve community infrastructures, particularly sewer and water systems to allow or stimulate development (Metz, 1977).

Companies have devised many methods to assist their workers in financing area housing and usually it is focused on that company's specific housing development. Energy Development sold several of its houses in Hanna under a rent/purchase option whereby once enough rent had been paid to Energy Development to equal a 5% mortgage downpayment it was transferred to a local bank with the mortgage applications. Ideal Basics carried employee, especially those with no or poor credit ratings, mortgages for two years to provide assurance to a local bank of the owner's fiscal reliability. Pathfinder absorbs a percentage of the lot and house price as an incentive to its employees to relocate to its single-family home subdivision in Wyoming. Basin Electric developed a special mortgage fund whereby the utility purchases employee mortgages as investments. Some companies are considering mortgage differential assumptions, while others shy away from any employee house financing schemes due to collection payment problems, especially after employee terminations (Metz, in press).

Education. Resource companies, when locating in rural areas, become involved in education facilities and programs essentially for six reasons: 1) a revenue lag time delays new school financing; 2) debt or bonding limit of a rural community is insufficient; 3) existence of a jurisdiction-tax revenue mismatch; 4) necessary for recruitment; 5) part of a permit requirement; and 6) shows commitment by the company to the community's well-being. In some instances, public relations can enter into the picture. There are many companies which feel that their tax payments are sufficient to compensate for the influx of school-age children and it is up to the state to remedy jurisdiction-tax revenue mismatches or allow tax pre-payment.

Assistance in mitigating school system impacts and upgrading a system has taken the form of land donation, in lieu of tax payments, prepaid taxes, gifts of buildings and equipment, monetary contributions, offers of labor and material, scholarships, employment programs, donations of educational material, and infrastructure/service assistance. While some assistance is the result of leveraging by, for instance, the Wyoming Industrial Siting Council, most is the result of a company's initiative or response to a community's recognized need.

As land is a common gift to school districts, often sites are located in planned subdivisions so as to enhance a company's subdivision and make the donation process easier. Colorado-Ute in Craig, ARCO in Wright, PP&L in Rock Springs, Colony in Battlement Mesa Western Energy in Colstrip, Phillips in Thoreau, Pathfinder in Shirley Basin, Gulf in Grants, MBPP in Wheatland, and AMAX and Carter in Gillette, for example, have donated land. A few resource companies, for instance, Texasgulf in Rock Springs and Tucson Electric in Springerville, Arizona, have actually given school buildings. Others, for instance, Colony, Amoco, Western Fuels, DG&T, IPA, and Union, gave front-end financing, some as a pre-payment of taxes. Many companies have contributed modular classrooms, unused office trailers, and additional funds to expand or refurbish existing school facilities and to supplement teacher salaries. MBPP assisted in new school construction by guaranteeing $5 million in tax-exempt bonds for a non-profit organization, which then leases the school facilities to the Platte County School District No. 1 in Wyoming.

A variety of companies have agreed to formulas which result in funding project-related school-age children. TVA has provided $1.4 million in mitigation payments based on the number of children of construction worker movers into the Hartsville area. VEPCO agreed to pay the costs of construction worker school children in two surrounding counties which do not receive project tax revenue. Puget Power and Light had agreed to make monthly payments on a per child operation and maintenance cost times a 1.5 secondary impact child factor to area schools. WPPSS agreed to a complicated formula of "pupil year" construction and operation and maintenance funding. Western Fuels has agreed to cover the costs of any school children above a negotiated baseline number.

Beyond such terms as free water to a Wyoming baseline school by Amax and the donation of school athletic fields in Hanna, Wyoming, companies provide funding for scholarships, special college degree

programs, information programs, and student employment. RME was to donate title to a coal reserve to Western Wyoming College for a mine training program. Several oil shale companies are providing funds, instructors, salvage equipment, and grantsmenship to establish or upgrade technical and engineering programs at Western Colorado schools.

Of course, there is always the negative example of the Green River School District building a school on land donated by a company in its subdivision only to find that the subdivision then was not built.

Public Utilities. A key growth inhibitor and major point of contention during a rapid growth period are inadequate community sewer and water systems, including insufficient well/treatment facility capacity, trunk line size, and distribution/collection lines. Usually assistance in upgrading and expanding these systems is a consequence of involvement in the supply/stimulation of area housing. Almost all temporary housing developments and some permanent developments, have their own independent systems. While companies can sometimes rightly claim that tax revenues should pay for system upgrading and expansion, often a lag in revenue, jurisdiction-tax revenue mismatch, or debt limits means systems cannot accommodate growth.

Resource companies have made numerous mitigation contributions to impact area communities. Western Fuels has agreed to commit $3,375,000 to improve Rangely sewer and water facilities. Colorado-Ute gave $915,000 to the City of Craig in order to receive permission for its Shadow Mountain Village. Union prepaid Parachute $000,000 in sewer and water tap fees and Colony prepaid $100,000. Part of Cyprus' $10 million mitigation effort in Challis, Idaho, involved a sewage treatment plant and new sewer/water distribution lines. DG&T prepaid one Utah water district $50,000 for future water connections and made grants of $1,340,000 to four area sewer and water districts based on a formula of project-related personnel distribution and current facility construction costs. Upland Industries enlarged the Green River water system and installed a temporary sewage treatment plant (to be replaced by municipal facilities later) at a cost of $750,000 to initiate a housing development. FMC invested $109,000 in Lyman, Wyoming's sewer and water systems, to compensate for the mismatch with regard to project taxes and employee location. IPA has given over $1 million to four communities to study and upgrade water systems, as well as $1.5 million to upgrade sewage systems in two communities. Kemmerer Coal and PP&L plus several other companies are paying half of the Town of Kemmerer's, Wyoming, share of an improved system. TVA has provided funds to Hartsville and Carthege, Tennessee, while PGE advanced money to impact communities in Oregon with no pay back obligation and prepaid some communities for future hookups. WPPSS has signed numerous construction impact agreements with State of Washington communities for over $1.5 million. MBPP guaranteed a $3 million loan for Wheatland system improvements.

Some company contributions have been earmarked for special projects. PGE contributed $5,000 to have a waterline laid to a school boundary in Boardman, Oregon. UII gave $100,000 to Craig for a water tank, as well as a no-interest construction loan. MBPP contributed $7,000 to a Wheatland water well, while PP&L spent several hundred thousand on exploratory well development for municipal wells; reimbursement by the City of Gillette is contingent upon success. North Antelope Coal has provided Gillette with a $150,000 system design grant and NERCO has provided Douglas with a $00,000 system design grant. Phillips gave land to Thoreau for a water tower, as well as funds for its construction. Phillips also makes payments for the cost differential between pre-project small distribution pipe and present pipe size now needed due to demand from the housing development. Several companies in the Gillette area covered the costs of extending sewer and water lines to the boundaries of properties which were later sold to developers.

Company contributions have also taken the route of assistance/donations of technical expertise, equipment, or facilities. Anaconda and Gulf donated engineering expertise to Grants with regard to the sewage system. Gulf drilled a water well for San Mateo. Kaiser and U.S. Steel presently supply water to East Carbon and Sunnyside, Utah, from their nine reservoirs. Valley Kamp has loaned its pumps and pipes to the community of Scofield.

On occasion public utility system mitigation can be in anticipation of problems. TVA paid three-quarter million dollars for new water wells and a water pipeline for Crown Point, New Mexico because of possible damage to the present system by several companies proposed area uranium mines.

Health, Public Safety, and Recreation. Public health, safety (police and fire protection), and recreation are three areas where companies contribute and employees volunteer frequently to improve area services and facilities. Improvement is essential to obtaining and maintaining an area quality of life.

While mine and plant sites are generally self-sufficient in guards, fire apparatus, trained fire and emergency crews, nursing staffs, and ambulances companies rely on area hospitals for special care and emergency treatment and community fire and police service to protect its workers and their families off-site. Mental health and recreation are achieving greater recognition today by companies.

Companies either on their own or through area industrial organizations (e.g., Southwest Wyoming Industrial Association (SWIA), Wyo-Mont Industrial Association, and Overthust Belt Association) have committed themselves to doctor and nurse recruitment (advertising, visitation costs, moving expenses, and guaranteed banknotes for use by doctors in setting up practices) and sponsorship of emergency medical training; clinic construction (e.g., PGE, FMC, Allied, U.S. Steel, Kaiser, and Montana Power), leasing ($1/year by Salt River Project), and equipping (e.g., Kaiser, Montana Power, and PGE); hospital support, expansion and upgrading, including new equipment, on a one-time (Western Fuels - $876,000 to the Rangely Hospital District; WPPSS to Prasser Hospital - $57,100; VEP to a Bact County Hospital; and IPA to the West Millard Hospital District) and annual basis; gifts of ambulances (e.g., Allied, IPA, and Arch Mineral); emergency radio communications (FAP); mental/human services/alcohol/drug programs (MBPP donated $250,000 to Wheatland and companies through the Gillette Chamber of Commerce Industrial Committee support area efforts) and a medical evacuation helicopter in Grand Junction, Colorado, supported by seven mining companies. In a few instances, companies give manpower and equipment, such as when SUNEDCO wired a hospital's emergency generator and constructed housing for it and Kerr-McGee donated nine days of heavy equipment operation to remove rocks from a hospital site.

Occasionally public health efforts by companies have expanded into peripheral areas as when Kerr-McGee gave land and Anaconda gave $30,000 for a new nursing home in Grants. Or, when United Nuclear and Gulf Minerals gave $30,000 to a Grants senior citizen's home.

Companies are usually quite willing to assist in the provision of fire protection for the remote communities in which their workers reside and workers are often volunteer firemen. FAP, United Nuclear, DG&T, Cyprus, Carter Mining, Western Energy, ARCO, WPPSS, TVA, and Salt River Project have contributed an assortment of new and used fire trucks, equipment, and fire stations. Gulf has run training programs for the San Mateo Fire Department. Western Fuels gave a lump sum of $120,000 to the Rangely Fire District. Increased fire protection lowers insurance rates for a whole community.

Company opinion is divided on providing funds and equipment to police departments. The Campbell County Sheriff's Department and City of Gillette Police Department have policies of not accepting gifts or contributions from mining and energy companies because it could compromise the departments if a strike or project management/employee friction developed. Yet, there are many instances of company assistance to police departments and the officers themselves. WPPSS, TVA, and VEP make mitigation payments to area police departments. Union and Colony approved, and RBOC was in the process of approving, impact payments to police departments. Union's payments to Parachute include $9,000 for a police car and equipment, and $43,000 annually for three years for two police officers, as well as payments for Garfield County deputy cars and officers. Cyprus bought several new police cars for the town of Challis. Kaiser gave a car to the Sunnyside Police Department. DG&T is supplying grant funds to Vernal and Uintah County, Utah, to assist in equipment and personnel expansion costs. IPA is giving financial assistance for a new public safety complex, deputies, equipment, and training in Millard as well as $50 a month to a sheriff's deputy assigned to a remote mine site MH park. IPA has also contributed to equipment and substation needs of State Highway Patrol and County Sheriff Departments.

Recreational needs of host communities and company-involved housing projects are a favorite for resource company contribution—monetary, equipment, and labor and materials. Utilities are well-known for the swimming, boating, educational, and wildlife facilities, passive and active, at power plant sites. Some mining companies are also including recreation in their reclamation plans. Mostly, resource companies are becoming known for their tens of millions of dollars in recreation centers, community centers, swimming pools, tennis courts, libraries, playgrounds, target ranges, jogging trails, bicycle paths, golf courses, baseball fields, horseshoe pits, shuffle board courts, open areas, "tot" lots, and large sodded parks which are built to accompany new towns, large subdivisions, and temporary housing facilities. Recreational facilities at temporary housing developments are often turned over to a community when the housing is no longer needed for project workers.

Resource companies have also become involved with a variety of recreation initiatives which are non-housing development related. Western Fuels is paying $820,400 to the Rangely Recreation District.

DG&T has made grants worth one-quarter million dollars to Uintah County and Vernal for the construction of additional recreation facilities and for salaries. IPA is contributing part of the three-quarter million dollar cost for new parks in Millard County and Delta City. Three utilities - TVA, PGE, and WPPSS - are supporting playgrounds and parks in their respective impact area communities. Gulf Minerals and United Nuclear have given city parks to Grants (one was eight acres). Ballfields were constructed in Gillette by Carter and in Grants by a resource company subcontractor using company earthmoving equipment. Kaiser and Kemmerer gave golf courses to Sunnyside and Kemmerer and UII gave in-kind through use of its equipment to improve a golf course in Craig. ARCO underwrote an equestrian program in Gillette. Almost all resource companies have given in money, equipment, and employee time to little leagues, softball teams, community rodeos and scouts. Community and area libraries are also recipients of company contributions by WPPSS and Western Fuels.

Miscellaneous. Resource companies assist communities in a variety of ways beyond those mentioned in the above categories. Some of these imaginative mitigation efforts can be tried almost universally, as with assistance for planners, grantsmen, workforce training, monitoring studies, and fiscal practices while others are unique to a project impact area.

Companies have been assisting local communities in the development of masterplans, ordinances, and codes to manage growth and to secure state and federal funds to alleviate impacts. Planners have been funded by single companies (MBPP, Montana Power, ARCO, Western Fuels, and PGE) and company associations (Wyoming Mining Association) and loaned by companies (RBOSC, IPA, and TVA); planning studies have been funded by companies for communities, counties, and impact areas (Oxy - $260,000, RBOSC - $333,000. Colowyo - $70,000, RME - $75,000, IPA - $85,000, WPPSS - $58,000, and Northeast Utilities - $40,000). In order to secure maximum state and federal funding specialized grantsmen have been hired by Gillette, Moffat County, Colorado, Millard County, and Franklin County, Washington through funding by the Gillette Chamber of Commerce Industrial Group, Colowyo, IPA, and WPPSS, respectively. Monitoring growth and change is essential in rapidly growing communities, especially for those communities impacted by several projects. Companies (MBPP, North Antelope Coal, Antelope Coal, Carter and Mobil) recently proposing large resource developments in Wyoming are required to monitor socioeconomic change. Resource companies in Colorado have to monitor employee residence location in keeping with the severance tax disbursement formulas. Other companies (Pennsylvania Power and Light, Western Fuels, DG&T, IPA,Basin Electric, Salt River Project, TVA, Otter Tail, Commonwealth Edison, Kansas City Power and Light, and Duke Power) monitor change for their own knowledge or as a function of company-community agreements (VEP and WPPSS) for impact payments.

Resource companies recognize the benefit of utilizing as much local labor as possible to reduce area immigration. Some companies offer special training programs for local residents, as well as to American Indians when a project is located near or on reservations.

Resource companies and state siting commissions have become more involved in local fiscal matters as the need for maximizing local revenues has become apparent. Local banks in impact areas are now becoming the location of corporate checking accounts, certificates of deposit, and project payrolls. Companies and many contractors and subcontractors are utilizing tax transfer techniques to maximize local receipt of sales and use taxes. Equipment suppliers and maintenance firms are being pressured to open local offices. Corporate offices are being situated locally as in the case of NERCO's Spring Creek Mine in Montana. The $2 million corporate office was located in Sheridan, Wyoming, where the employees had chosen to reside to bring tax revenue to that community.

Only in a few instances have companies subsidized local administrative costs attributable to a project (IPA - Millard County, Delta City, Hinkley, Oak City, Lynndyl, and Teamington, Utah, and Western Fuels - Rio Blanco County and Rangely). Companies have helped with a variety of administrative costs: Carter is to fund a $20,000 feasibility study on converting a school for Gillette city offices; TVA has funded local planning commissions; Empire Energy gave Craig a payroll machine; and IPA and ARCO have contributed to administrative office facilities. Numerous companies have donated secretarial, photocopying, and printing assistance.

Assorted unique mitigation efforts have also been proposed and performed. Land for churches has been given by ARCO in Wright, Gulf in Grants, Phillips in Thoreau, Western Energy in Colstrip, and Colony in Battlement Mesa (10 lots). Mine water from Kaiser's Sunnyside Mine is used by the Sunny-

side to irrigate local parks. Braztah relocated, at no expense to the homeowner, 72 houses from its Castlegate, Utah, property to a new subdivision with a lot and basement provided. Fort Union Coal has offered two tons of coal free to each Gillette resident aged 62 or older. Antelope Coal is to subsidize Douglas day centers $2 per day for each employee utilizing the facilities. Cyprus gave Challis a bulldozer for their landfill. Plateau allows the Ticaboo TV antennae to be hooked up to its transformer. Big earth-moving equipment from the Rawhide and Caballo occasionally helps with snow removal when blizzards strike Gillette. Carter corrected a drainage problem near a Gillette elementary school to eliminate a hazardous water hole. Monterey has offered water from a lake on its property to Carlinville, Illinois in case the community's reservoir is depleted. There are numerous other examples which could be cited.

Company-Community Interactions. An increasing number of resource companies are putting more emphasis on company-community interaction. This is partly due to the passage of the National Environmental Policy Act of 1969 and the increasing state and Federal permits and agency reviews. But, companies have also recognized the benefits of a prepared community and mitigated impacts. Interactions are not to be considered the solution to all problems and the manner of interaction varies with each pair of participants or group of participants (Cluett, 1979).

The process of interaction is still not an established art. There are varying levels of personnel interaction (community leaders, citizens, state and local government officials and company executives, representatives, and employees), intensity (occasional meetings, newsletters, regular meetings, and a local representative), and styles (presentations, negotiations, and adversarial proceedings). Many companies are placing project representatives in planned site areas to collect local input and disseminate project information, as well as act as a liaison and conduit of concern and questions. Timing of the interactive process is important and must be initiated in the formative stages of the project. Respect for the needs and concerns of each party is also essential.

Solitary projects, for example Anaconda's Molybdenum Mine in Tonopah, Cyprus Mines' Molybdenum Mine in Challis, MBPP's Laramie River Station in Wheatland, VEP's Pumped Storage Project in Bath County, Virginia, and Intermountain Power Agency's Intermountain Power Project in Delta, have taken great strides in interaction. The result is general public support from area residents and mitigation efforts that are reasonable and considered successful to project and community participants.

Where multiple projects are impacting areas, for instance, Gillette, Evanston, Rock Springs-Green River, Grants, Bismarck, North Dakota, and the Colorado West Slope, voluntary industry organizations, some with community participants, have been formed. Five energy companies in 1977 organized the Inter-Industry Technical Assistance Team (ITAT) to monitor socioeconomic change and provide Mercer County, North Dakota, citizens and public officials with technical assistance. In Sweetwater County, Wyoming, 12 major companies involved in coal, electrical generation, and trona mining formed the Southwest Wyoming Industrial Association (SWIA) to provide employment information, limited legal, engineering and management services to area communities, and help in front-end financing. Three big oil firms organized the Overthrust Industrial Association to coordinate aid to communities impacted by energy development in the Evanston area. A Wyo-Mont Industrial Association was formed in Sheridan to collect, assemble, and disseminate information on energy developments in Sheridan County, Wyoming, and Big Horn County, Montana. There is always the concern among these area company organizations over a potential perception of company collaboration to the detriment of the public or a government anti-trust initiative. But, company organizations can be a valuable asset to an impact area and provide mitigation efforts beyond that which is normally initiated.

Conclusions

Natural resource companies are committing large amounts of capital to a wide range of new extraction and conversion projects. The fiscal consequences to a company of any schedule delays or workforce problems are mounting, and companies are recognizing that it is in their best interests to invest time and capital in enhancing beneficial and mitigating adverse socioeconomic impacts. Mitigating the adverse impacts receives the most attention by companies, communities, consultants, experts, and state and federal governments. Mitigation is the focus of conflicting opinions regarding

responsibility, strategy, and effort. There are no hard, fast, or tried and true rules for company involvement in mitigation efforts. Each mitigation effort must be tailored and negotiated to match the unique characteristics of individual projects and circumstances of specific locales.

Companies must assume financial responsibility for the temporary impacts and area needs created by their projects. They must also offer financial and technical assistance to impact areas, not just the host political jurisdiction, when local, state, federal, and special fund sources of revenue or technical assistance are not available or insufficient. But, local, state, and federal governments must also recognize their responsibilities and make adjustments in tax jurisdiction boundaries and disbursement formulas so that impacted areas are properly defined and receive an adequate share of lease, royalty, severance tax, permit fee, special use and service charges, and sales tax payments. Laws need to allow innovative uses of tax pre-payments, housing mortgage bonds, changeable debt and bounding limits, industrial loans with delayed prepayment, and revised revenue assistance formulas. Enabling legislation is required in most states to allow impact areas to negotiate the mitigation efforts.

Each impact area's characteristics, capacities, attitudes, legal framework, and needs have to be inventoried and evaluated with respect to one or more project's potential impacts before assumptions of responsibility can be determined. Where legal adjustments are necessary by local, state, and federal governments to assist in mitigation, these should be done promptly. Mitigation negotiations should be carried out between companies and impact area communities in good faith, with adequate consideration given to each party's limitations, desires, and financial capabilities, and as a compromise. Mitigation efforts need to be flexible and dynamic to reflect actual change as revealed in monitoring studies. In some instances, little or no mitigation is necessary by a company.

Because of recent "bust" times in many resource development communities, mitigation strategy and effort will undergo some modifications. Local, state, and company responsibilities, fiduciary and fiscal, are being reviewed and new "boom" area mitigation efforts will reflect today's concerns. Company involvement in impact area mitigation will surely increase as a result, as well as an involvement in an impact area safety netting in case of "bust."

References

Allen, James B. *The Company Town in the American West*. Norman: University of Oklahoma Press, 1900.

Cluett, Christopher, et al. "Individual and Community Response to Energy Facility Siting: A Review of the Literature." Seattle: Battelle Human Affairs Center, 1979.

Denver Research Institute. "Employee Busing Investigation," prepared for AMAX, Inc., August 11, 1978.

Denver Research Institute. "Industry Contributions to Community Development in Resource Development Communities," prepared for AMAX, Inc., March, 1979.

Metz, William C. "Construction Workforce Management: Worker Transportation and Temporary Housing Techniques," sponsored by the Western Rural Development Center, Oregon State University, Corvallis, Oregon, September 1981.

Metz, William C. "Energy Industry Involvement in Employee Transportation," *Transportation Quarterly*, 30:503-584.

Metz, William C. "Residential Aspects of Coal Development." Paper read at Annual American Institute of Planners Conference, October 1977, at Kansas City, Missouri.

Metz, William C. "Socioeconomic Impact Management in the Western Energy Industry," In *Proceedings of the Institute of Environmental Sciences*, Seattle, Washington: Institute of Environmental Sciences, 1979.

Metz, William C. "The United States Energy Industry's Involvement in Housing," *Energy and Minerals*, in press.

Case Law and Legal Opinion

Chapter X

Case Law and Legal Opinion

Prepared by Division of Energy and Resources, Office of the Solicitor

Introduction

Requirements for off-site social and economic mitigation for mineral or other development on Federal lands is an area characterized by little applicable case law. There is a considerable range of legal opinion in this area, but only a few cases have been conclusively litigated. Except for a recent decision by the Federal District Court for the District of Montana, Northern Cheyenne Tribe v. Hodel, Civ. No. 82-116-BLG (May 28,1985), discussed below, these decisions do not directly address BLM responsibilities for community impact mitigation. The Northern Cheyenne decision, moreover, is limited to socioeconomic mitigation obligations only as they relate to the Secretary's trust responsibilities to Indian tribes other than Alaska Natives.1/ Furthermore, the authority of the Secretary to attach socio-

---

1/ The court did state that the revisions to 2(a) of the Mineral Leasing Act of 1920, (MLA) added by section 3 of the Federal Coal Leasing Amendments Act of 1976 (FCLAA) required the Secretary to "investigate and analyze [the possible off-lease impacts of Federal coal lease development], not merely to speculate on the basis of information that is already available, however incomplete." (Mem. Op. at 22, quoting from City of Davis v. Coleman, 521 F. 2d 661, 679 (9th Cir. 1975)). The relevant portion of FCLAA section 3 obligates the Secretary to "consider effects which mining of the proposed lease might have on an impacted community or area, including, but not limited to impacts on the environment, on agricultural and other economic activities, and on public services" before issuing any coal lease. Though the court found that the Secretary had failed to consider these 210(a)(3)(C) effects, the court did not hold that this revision to section 201 obligated the Secretary to impose socioeconomic stipulations on Federal coal leases.

omic stipulations under section 30 of the Mineral Leasing Act, his "public welfare" power, has not been reviewed in the courts. Until tested in the judicial system, it remains subject to differing interpretations.

In Northern Cheyenne, the court held that the Secretary's failure to consider the socioeconomic impacts of leasing coal tracts adjacent to or near the northern Cheyenne reservation in the 1981-82 Powder River Region Coal Lease Sale Environmental Impact Statement and other supporting documents violated section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4332(2)(C), section 3 of the Federal Coal Leasing Amendments Act of 1976 (FCLAA), 30 U.S.C. 201(a)(3)(C), and the Secretary's trust responsibility to the Northern Cheyenne Tribe. This is the first court decision that has directly addressed the Department's off-lease socioeconomic mitigation responsibilities. It is limited to Indian tribes for which the Secretary has trust responsibilities by statute or treaty. The court further held that where deleterious off-lease impacts to Indian tribes from potential coal development have been identified, the Secretary's trust responsibility for Indian tribes requires that he consider and implement socioeconomic mitigation measures. The court did not, however, hold that the Department is required to include off-lease mitigation stipulations in coal leases as the method to mitigate such impacts.

Because this decision is concerned only with the Secretary's trust responsibilities to Indian tribes, even if the district court decision is affirmed on appeal, the decision will not resolve the Department's socioeconomic responsibilities for off-lease impacts affecting State and local

governmental concerns. Moreover, Alaska Natives, because of their unique status as Natives with respect to whom the United States assumed no trust responsibility, are not covered by the decision.2/

The Department has petitioned the court for reconsideration of the portion of the decision cancelling the Montana leases. A more detailed explanation of this case and its implications for departmental activities will be added to this Guide when the case is finally resolved.

There are two other cases, one judicial, the other administrative, that merit extended discussion because they have implications for the Department's off-lease socioeconomic responsibility and authority. These are Ventura County v. Gulf Oil Corporation, 601 F.2d 1080, (9th Cir. 1979), aff'd without opinion, 445 U.S. 947 (1980) and Blackhawk Coal Company, 60 IBLA 96 (1982). These decisions are included and analyzed in this chapter. In addition, this chapter includes: a December 3, 1983, legal opinion interpreting Ventura County by the Associate Solicitor, Energy and Resources to the Deputy Assistant Secretary, Land and Water Resources; and an April 3, 1985, memorandum from the Regional Solicitor, Rocky Mountain Region, to the Colorado State Director, BLM, refining wording of a proposed stipulation discussed in the 1983 opinion dealing with Federal lessees' obligations to comply with local law, including impact mitigation law.

2/ This principle regarding Alaska Natives is developed in North Slope Borough v. Andrus, 642 F.2d 589, 611 (D.C. Cir. 1980).

Also included are three views of the Department's authority to address off-lease impacts under section 30 of the Mineral Leasing Act of 1920 (MLA), 30 U.S.C. 187 et seq. (1982): an article prepared by Professor George Pring; a responding article prepared by John R. Little, the former Regional Solicitor of the Rocky Mountain Region; and comments submitted to the BLM by the Shell Mining Company.

Last is a discussion of sections 30 and 35 of the MLA as they relate to congressional intent under the MLA to deal with mitigation of impacts on communities in the West caused by development of Federal leased minerals.

Discussion of Ventura County v. Gulf Oil Corporation, 601 F.2d 1080 (9th Cir. 1979), aff'd without opinion, 445 U.S. 947 (1980)

The Ninth Circuit in Ventura County concluded that State and local land use and other regulations (which of course could include State and local socioeconomic regulations) governing activities on Federal lands cannot prohibit or regulate such activities to the point of "impermissibly conflicting with achievement of a congressionally approved use of Federal lands . . . ." 601 F.2d at 1086. This is the preemption principle, which, in relation to acitivities on Federal lands, was described by the Supreme Court in Kleppe V. New Mexico, 426 U.S. 529, 543 (1976), as follows:

> [W]here . . . [police power] State laws conflict . . . with other [Federal] legislation passed pursuant to the Property Clause, the law is clear: The State laws must recede.

Beyond these general statements, the ultimate implications of Ventura County are unclear. The Ninth Circuit recently reaffirmed Ventura County in Granite Rock Co. v. California Coastal Comm'n, 768 F.2d 1077 (9th Cir. 1985), appeal filed. In Granite Rock, a mining company extracting white limestone in the Los Padres National Forest on an unpatented mining claim under the auspices of the Mining Law of 1872, challenged the California Coastal Commission's Authority to require it to apply for a State permit under the California Coastal Act to continue its mining operations. Reversing the Federal District Court decision, the Ninth Circuit held that the Mining Law of 1872, and the regulations by the Forest Service under its Organic Administration Act, preempted the State from requiring Granite Rock to apply for a State permit under the California Coastal Act. In so holding, the circuit court reasoned that the Federal Coastal Zone Management Act (CZMA) did not neutralize the preemptive effect of the above acts and

that the CZMA was not intended to restore authority that the States might previously have lost through Federal preemption. An appeal has been filed and the Supreme Court has agreed to hear it.

Two recent State court decisions, Elliott v. Oregon International Mining Co., 654 P.2d 663 (Or. Ct. App. 1982), and Brubaker v. Board of County Comm'rs, El Paso Cty., 652 P.2d 1050 (Colo. 1982) (en banc), both citing Ventura County favorably, have held, similar to the Ninth Circuit's decision in Granite Rock, that county ordinances which prohibit Federal mining claimants from conducting operations on their mineral locations are preempted by the Mining Law of 1872. It is important to note, however, that neither decision involves the Department's authority or responsibility to mitigate adverse socioeconomic impacts caused by mineral development. Moreover, a parallel line of cases indicate State courts' predilection, when faced with a preemption case, to find no conflict between the State or local law and relevant Federal law. E.g., State ex rel. Andrus v. Click, 554 P.2d 969 (Idaho 1976) where the Idaho Supreme Court held that regulations promulgated pursuant to the Idaho Dredge and Placer Mining Protection Act, which required a State permit for dredge mining operations, including operations on Federal lands, were not preempted by the Mining Law of 1872; and State ex rel. Cox v. Hibbard, 570 P.2d 1190 (Or. 1977), where the Oregon Court of Appeals held that neither the United States Consitution, the Oregon Admission Act, nor the Mining Law of 1872 preempted the State's authority to require holders of an unpatented mining claim on public lands to obtain a State permit prior to digging a diversion ditch.

George Pring argues in his article that, in Ventura County, extreme facts provoked extreme law and that the decision presents no major obstacle to imposition of Federal lease stipulations which require lessees to comply with all relevant State and local permits. On the other hand, the Regional Solicitor's April 3, 1985, memorandum to the BLM's Colorado State Director has suggested that Ventura County implies that any such lease stipulation be limited to only those State and local laws which do not "impermissibly conflict with the achievement of a congressionally approved use of Federal lands." The conclusion of this memorandum has been utilized, along with the 1983 Associate Solicitor's opinion, by the BLM in responding to the adverse comments by Rio Blanco County and the Northwest Colorado Association of County Governments on the proposed Piceance Basin Resource Management Plan (RMP). The local governments criticized the RMP's wording regarding the applicability of State and local laws to Federal oil shale lessees. The county and the association stated that the proposed RMP was not in compliance with 202(c)(9) of FLPMA, 43 U.S.C. 1712 (c)(9)(1982), which directs the Secretary to prepare land use plans that are "consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act." The Director responded by stating that the final RMP would reflect that Federal lessees would be required to comply with all State and local laws and regulations to the extent that they do not "impermissibly conflict with a congressionally approved use of Federal lands."

As noted above, because of FLPMA 202(c)(9)'s consistency requirements, the States also have some leverage, through BLM's land use planning process, to influence the Bureau decision making that causes or mitigates socio-

economic impacts. It should be noted that consistency is not required in the Forest Service. The Forest Service in its land use planning is required only to coordinate its plans with State and local land use plans. Thus State and local government ability to affect decisions on Forest Service properties may therefore be more limited. 16 U.S.C. Section 1604(a).

Pending further judicial treatment of Ventura County, the express holding by the Ninth Circuit should be followed. For social and economic mitigation, the meaning of this decision for BLM is that BLM may choose to insert lease stipulations requiring lessees to comply with all State and local laws, ordinances, and regulations insofar as such laws do not impermissibly conflict with achievement of a congressionally approved Federal land use. Without doubt, Ventura County limits the authority of State and local officials to impose socioeconomic or other mitigation requirements on Federal lessees.

However, as the State of Wyoming Supreme Court discussed in a recent decision, Gulf Oil Corp. v. Wyoming Oil & Gas Conservation Comm'n (WOGCC), No. 84-82 (Wyoming, Jan. 4, 1985), Ventura County does not preclude all regulation of Federal mineral lessees by State and local governments. In that decision, the court upheld a decision by WOGCC denying Gulf its preferred road access route across Federal lands to a Federal oil and gas lease through the town of Story, Wyoming, because of adverse environmental consequences incident to such access; i.e., permanent scarring of a nearby mountain, which would be visible from the town. The court noted that since Gulf had other access options, the WOGCC denial had not precluded mineral

development. It should be noted that BLM had disallowed Gulf's preferred access route, issuing Gulf a permit to drill the well on the condition that it use another available route. Thus the potential preemption issue, whether WOGCC could prohibit a Federal lessee from using an access route approved by BLM and the Forest Service, was avoided by consistent Federal and local action.

The Gulf Oil case carries another message emphasized by Professor Pring. Ventura County does not affect the Secretary's authority to impose local impact mitigation conditions on Federal mineral leases or permits if the Secretary determines that such conditions are in the public interest. Further clarification of the Secretary's authority to impose stipulations under section 30 of the MLA is found in the discussion of the Blackhawk IBLA decision beginning on page X-23.

The ruling of the Ninth Circuit Court of Appeals which affirms the district court ruling for Ventura County is shown in Exhibit 9. The December 3, 1983, legal opinion interpreting Ventura County by the Associate Solicitor, Energy and Resources to the Deputy Assistant Secretary, Land and Water Resources is shown in Exhibit 10 and the April 3, 1985 memorandum from the Regional Solicitor, Rocky Mountain Region, to the Colorado State Director, BLM, refining wording of the stipulation discussed in the 1983 opinion is shown in Exhibit 11.

Ventura County v. Gulf Oil Corp.

Nos. 77-2319, -2716 (9th Cir. Aug. 3, 1979)

Affirming the district court, the Ninth Circuit Court of Appeals rules that the holder of a federal lease and oil drilling permits in a national forest need not obtain a permit pursuant to a county's zoning ordinances in order to exercise its leaseholder rights. Relying on *Kleppe v. New Mexico*, 6 ELR 20545 (U.S. 1976), the court notes that congressional enactments under the Property Clause of the Constitution possess broad preemptive powers. The court then holds that where, as here, the federal government has authorized a specific use of federal lands, the county may not interfere with that use, either temporarily or permanently, in an attempt to substitute its judgment for that of Congress. Savings provisions in the Mineral Leasing Act do not avail the county because they neither recognize concurrent state jurisdiction nor give states and their subdivisions the right to apply local regulations which directly conflict with achievement of a congressionally approved use of federal lands. If federal officials fail to comply with the requirements of the National Environmental Policy Act for federal-local cooperation concerning the environmental impact of federal action under the Mineral Leasing Act, the county has a remedy against those officials for violation of the former statute.

Counsel for Appellant
R. Thomas Harris, Ass't County Counsel
501 Poli St., Ventura CA 93001
(805) 654-2580

Counsel for Appellee
James L. O'Loughlin
Gulf Oil Corp.
1801 Ave. of the Stars, Suite 1403, Los Angeles CA 90054
(213) 553-3800

Counsel for Amicus Curiae State of California
Sylvia O. Cano
Office of the Attorney General
Tishman Bldg., 3580 Wilshire Blvd., Los Angeles CA 90010
(213) 736-2161

Counsel for Amicus Curiae United States
Neil T. Proto
Land and Natural Resources Division
Department of Justice, Washington DC 20530
(202) 633-2776

Before HUFSTEDLER and WRIGHT, Circuit Judges, and CALLISTER,* District Judge.

HUFSTEDLER, Circuit Judge:

The question on appeal is whether the County of Ventura ("Ventura") can require the federal Government's lessee, Gulf Oil Corporation ("Gulf"), to obtain a permit from Ventura in compliance with Ventura's zoning ordinances governing oil exploration and extraction activities before Gulf can exercise its rights under the lease and drilling permits acquired from the Government. The district court denied Ventura's motion for a preliminary injunction, and dismissed Ventura's second amended complaint. Ventura appeals. We uphold the district court because the local ordinances impermissibly conflict with congressional regulation of Gulf's activities on government land.

On January 1, 1974, the Department of the Interior, Bureau of Land Management, pursuant to the Mineral Lands Leasing Act of 1920 (30 U.S.C. §§ 181 *et seq.*), leased 120 acres located within the Los Padres National Forest in Ventura for purposes of oil exploration and development. A subsequent assignment of this lease to Gulf was approved by the Department of the Interior, effective April 1, 1974. On February 25, 1976, the United States Department of the Interior, Geological Survey, issued a permit approving Gulf's proposal to drill an oil well pursuant to its lease. On March 8, 1976, and April 15, 1976, the United States Department of Agriculture, Forest Service, also granted its permission, and on March 8, 1976, the California Resources Agency, Division of Oil and Gas, approved the proposed exploration. After drilling operations were commenced on April 28, 1976, Gulf pursued activities related to oil exploration and extraction on the leased property, and it intends to continue development of both its present and other drill sites.

Throughout this period the leased property has been zoned Open Space ("O-S") by Ventura. Under its zoning ordinance, oil exploration and extraction activities are prohibited on O-S property unless an Open Space Use Permit is obtained from the Ventura County Planning Commission in accordance with Articles 25 and 43 of the Ventura County Ordinance Code. The O-S Use Permits are granted for such time and upon such conditions as the Planning Commission considers in the public interest. The permits contain 11 mandatory conditions and additional conditions are committed to the Planning Board's discretion.

On May 5, 1976, Ventura advised Gulf that it must obtain an O-S Use Permit if it wished to continue its drilling operations. Gulf refused to comply, and on May 20, 1976, Ventura brought suit in the California Superior Court seeking a declaratory judgment that Gulf's activities are subject to Ventura's zoning ordinances. The case was removed to the district court. Following the filing of its second amended complaint, Ventura moved for a preliminary injunction with respect to the first two counts of its second amended complaint, and Gulf moved to dismiss the complaint. The trial on the merits was consolidated with the hearing on Gulf's motions. After denying the injunction, the district court finally dismissed the action.[1]

Ventura contends that the district court erred in concluding that the Supremacy Clause of the Constitution precludes enforcement of the zoning ordinances against Gulf both because Congress lacked the power to preempt local regulation and because, even assuming Congress had such power, its enactments provide no basis for finding preemption, either express or implied.

Although Ventura and amicus argue extensively that congressional enactments under the Property Clause[2] generally possess no preemptive capability, we believe that *Kleppe v. New Mexico* (1976) 426 U.S. 529, 96 S.Ct. 2285, 49 L.Ed.2d 34, is dispositive. In *Kleppe*, New Mexico authorities entered federal lands and rounded up 19 wild burros pursuant to the New Mexico Estray Law, N.M. Stat. Ann. § 47-14-1 *et seq.* (1966). The Bureau of Land Management demanded the return of the burros under the Wild Free-roaming Horses and Burros Act, 16 U.S.C. §§ 1331-1340, which was passed in 1971 to protect wild horses and burros on the public lands of the United States. The New Mexico authorities refused to comply and sought a declaratory judgment that the act was unconstitutional. The Supreme Court

* Honorable Marion J. Callister, United States District Judge, District of Idaho, sitting by designation.

1. The district court initially dismissed the first and second counts of the second amended complaint; Ventura thereafter stipulated to dismissal of the remaining counts of the complaint. Thereafter, the district court dismissed the entire action.

2. The Property Clause of the Constitution provides that "The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States . . ." (U.S.Const., Art. IV, § 3, cl. 2.)

upheld the act's constitutionality, stating:

"Absent consent or cession a State, undoubtedly retains jurisdiction over federal lands within its territory, but Congress equally surely retains the power to enact legislation respecting those lands pursuant to the Property Clause. And when Congress so acts, the federal legislation necessarily overrides conflicting state laws under the Supremacy Clause. As we said in *Camfield v. United States*, 167 U.S. [518], at 526 [17 S.Ct. 864 at 867, 42 L.Ed. 260] in response to a somewhat different claim: 'A different rule would place the public domain of the United States completely at the mercy of state legislation.'" (*Kleppe v. New Mexico, supra*, 426 U.S. at 543, 96 S.Ct. at 2293 (citations omitted).)

New Mexico has argued for a narrow reading of the Property Clause, contending that the clause provided an independent basis of congressional jurisdiction only for acts concerning the disposition of federal property or incidental rules regarding its use and for acts necessary to protect federal lands. The Supreme Court stated in response that "we reject appellees' narrow reading of the Property Clause," and later continued that "while the furthest reaches of the power granted by the Property Clause have not yet been definitely resolved, we have repeatedly observed that '[t]he power over the public land thus entrusted to Congress is without limitations.'" (*Id.* at 537 and 539, 96 S.Ct. at 2290 and 2291.) In light of *Kleppe*, the renewed attempt to restrict the scope of congressional power under the Property Clause in the present case is legally frivolous.

Ventura next contends that even if Congress had the power to enact overriding legislation, there is no evidence of either a congressional intent to preempt local regulation or a conflict between local and federal law that can be resolved only by exclusion of local jurisdiction. We need not consider the extent to which local regulation of any aspect of oil exploration and extraction upon federal lands is precluded by federal legislation; the local ordinances impermissibly conflict with the Mineral Lands Leasing Act of 1920 and on this basis alone they cannot be applied to Gulf.

The extensive regulation of oil exploration and drilling under the Mineral Leasing Act is evident from the present record. The basic lease assigned to Gulf in 1974 contains approximately 45 paragraphs including requirements of diligence and protection of the environment as well as reservation of a one-eighth royalty interest in the United States. Because the lands lie within a National Forest, the lease requires Gulf's acceptance of additional Department of Agriculture conditions designed to combat the environmental hazards normally incident to mining operations. Specific drilling permits were also required from the Department of the Interior, Geological Survey, and the Department of Agriculture, Forest Service. The Geological Survey, which has formalized its procedures in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321 *et seq.*), approved the proposed drilling on February 25, 1976, subject to 10 conditions which assure continued and detailed supervision of Gulf's activities. And on March 8, and April 15, 1976, the Forest Service issued a drilling permit subject to conditions focusing upon protection of the National Forest. Finally, Gulf is subject to the extensive regulations governing oil and gas leasing (43 C.F.R., Part 3100) and both sub-surface and surface operations (30 C.F.R., Part 221) promulgated by the Secretary of the Interior under his authority "to prescribe necessary and proper rules and regulations to do any and all things necessary to carry out and accomplish the purposes" of the act. (30 U.S.C. § 189.) And since the lease concerns lands within a National Forest, Secretary of Agriculture regulations governing oil and gas development are also applicable. (36 C.F.R., Part 252.)

Despite this extensive federal scheme reflecting concern for the local environment as well as development of the nation's resources, Ventura demands a right of final approval. Ventura seeks to prohibit further activity by Gulf until it secures an Open Space Use Permit which may be issued on whatever conditions Ventura determines appropriate, or which may never be issued at all. The federal Government has authorized a specific use of federal lands, and Ventura cannot prohibit that use, either temporarily or permanently, in an attempt to substitute its judgment for that of Congress.

The present conflict is no less direct than that in *Kleppe v. New Mexico, supra*. Like *Kleppe*, our case involves a power struggle between local and federal governments concerning appropriate use of the public lands. That the New Mexico authorities wished to engage in activity that Congress prohibited, while the Ventura authorities wish to regulate conduct which Congress has authorized is a distinction without a legal difference.

Relying upon *Huron Portland Cement Co. v. Detroit* (1960) 362 U.S. 440, 80 S.Ct. 813, 4 L.Ed.2d 852, Ventura argues that this conclusion is unjustified because, unlike *Kleppe*, the present conflict has not ripened. (*See also Askew v. American Waterways Operators* (1973) 411 U.S. 325, 93 S.Ct. 1590, 36 L.Ed.2d 280.) In *Huron*, the Court allowed application of a local smoke abatement ordinance to a vessel whose equipment had been federally licensed only because it concluded "that there is no overlap between the scope of the federal ship inspection laws and that of the municipal ordinance here involved."[3] (*Huron, supra*, 362 U.S. at 446, 80 S.Ct. at 817.) Ventura prefers the Court's observation: "To hold otherwise would be to ignore the teaching of this Court's decisions which enjoin seeking out conflicts between state and federal regulation where none clearly exists." (*Id.* at 446, 80 S.Ct. at 817–818.) It argues that since Gulf has never applied for a use permit, an adjudication of preemption is in conflict with *Huron*. We disagree. This argument ignores the very relief that Ventura sought when it asked to enjoin Gulf's operations. Ventura cannot bring an action seeking immediate recognition and implementation of its veto power over the Government's lessee, and successfully contend that an adverse ruling would require "seeking out conflict" unnecessarily. The issue is whether Ventura has the power of ultimate control over the Government's lessee, and this issue persists whether or not a use permit would eventually be granted.

Federal Power Commission v. Oregon (1955) 349 U.S. 435, 75 S.Ct. 832, 99 L.Ed. 1215, presented a similar question. In that case, the Federal Power Commission issued a license to construct and operate a private hydroelectric plant on reserved lands of the United States. The license included permission to construct a dam across the Deschutes River. Oregon challenged the exclusive jurisdiction of the Commission and contended that the licensee must acquire a state as well as a federal permit. The Court held that the Commission's jurisdiction over the reserved lands of the United States was proper under the Property Clause, and that this jurisdiction was exclusive: "To allow Oregon to veto such use, by requiring the State's additional permission, would result in the very duplication of regulatory control precluded by the *First Iowa* decision [*First Iowa Hydro-Electric*

3. It has been suggested that the Court was actually applying a balancing test and that because the state's interest in air quality protection was strong and only minimally impinged the federal regulatory scheme, the local ordinance was protected. (Note, *The Preemption Doctrine: Shifting Perspectives on Federalism and the Burger Court*, 75 Colum.L.Rev. 623, 629 n. 37 (1975).) A recent case apparently applied a flexible supremacy, balancing test. (*Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Ware* (1973) 414 U.S. 117, 94 S.Ct. 383, 38 L.Ed.2d 348.) However, the conflict in the present case strikes at the heart of the federal regulation. The Mineral Lands Leasing Act and extensive permit procedures are designed for the very purpose of circumscribing the conditions under which the Government lessee will operate.

Co-op v. FPC] 328 U.S. 152, 177-179, 66 S.Ct. 905, 90 L.Ed. 1143. No such duplication of authority is called for by the Act" (*Id* at 445, 75 S.Ct. at 838. *See* Federal Power Act, 16 U.S.C. §§ 791a–825r.)

Ventura attempts to distinguish *Federal Power Commission v. Oregon* on the basis of reservations of local jurisdiction contained in sections 30 and 32 of the Mineral Lands Leasing Act (30 U.S.C. §§ 187, 189).[4] It contends that although preemption was perhaps appropriate in light of the narrow reservations of local jurisdiction in the Federal Power Act, a similar finding in the present case is unwarranted given the broad savings provisions contained in the Mineral Lands Leasing Act.

The proviso in § 187 provides that "[n]one of *such provisions* shall be in conflict with the laws of the states in which the leased property is situated." (30 U.S.C. § 187.) But, as Gulf points out, by the use of the language "such provisions," the proviso relates only to the provisions of the preceding sentence. These provisions relate to employment practices, prevention of undue waste and monopoly, and diligence requirements. There is no mention of land use planning controls. Moreover, the proviso assures only that the Secretary of the Interior shall observe state standards in drafting the lease's terms. It is not a recognition of concurrent state jurisdiction.

Nor is the savings clause in § 189 of any avail. After delegating to the Secretary of the Interior broad authority to prescribe rules and regulations necessary to effect the purposes of the act, the section continues:

> "Nothing in this chapter shall be construed or held to affect the rights of the States or other local authority to exercise any rights which they may have, including the right to levy and collect taxes upon improvements, output of mines, or other rights, property, or assets of any lessee of the United States." (30 U.S.C. § 189.)

The proviso preserves to the states only "any rights which they may have." While this is an express recognition of the right of the states to tax activities of the Government's lessee pursuant to its lease (*Oklahoma Tax Commission v. Texas Co.* (1949) 336 U.S. 342, 69 S.Ct. 561, 93 L.Ed. 721), and has been relied upon in part to uphold forced pooling and well spacing of federal mineral lessee operations (*Texas Oil & Gas Corp. v. Phillips Petroleum Co.* (W.D.Okl.1967) 277 F.Supp. 366, 371, *aff'd* (10th Cir. 1969) 406 F.2d 1303, 1304), the proviso cannot give authority to the state which it does not already possess. Although state law may apply where it presents "no significant threat to any identifiable federal policy or interest" (*Texas Oil & Gas Corp. v. Phillips Petroleum Co., supra*, at 371), the states and their subdivisions have no right to apply local regulations impermissibly conflicting with achievement of a congressionally approved use of federal lands and the proviso of § 189 does not alter this principle.

Finally, we are reassured in the correctness of our decision by policy considerations implicitly reflected in the structure and operation of the Mineral Lands Leasing Act of [illegible] and the National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321 *et seq.*) As Ventura recognized in filing its second amended complaint, the National Environmental Protection Act ("NEPA") and the guidelines, regulations, and Executive Orders issued in pursuance of that act,[5] mandate extensive federal consideration and federal-local cooperation concerning the local, environmental impact of federal action under the Mineral Lands Leasing Act. If federal officials fail to comply with these requirements, Ventura has a remedy against those officials.

Our decision does not mean that local interests will be unheard or unprotected. In rejecting a local veto power while simultaneously guarding local concerns under NEPA, local interests can be represented, the integrity of the federal leases and drilling permits reconciling national energy needs and local environmental interests can be protected, and the ultimate lessee will be responsible to a single master rather than conflicting authority.

Although we recognize that federal incursions upon the historic police power of the states are not to be found without good cause (*see, e. g., Rice v. Santa Fe Elevator Corp.* (1947) 331 U.S. 218, 230, 67 S.Ct. 1146, 91 L.Ed. 1447), we must affirm because "under the circumstances of this particular case, [the local ordinances] stand as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." (*Hines v. Davidowitz* (1941) 312 U.S. 52, 67, 61 S.Ct. 399, 404, 85 L.Ed. 581. *Accord, Jones v. Rath Packing Co.* (1977) 430 U.S. 519, 526, 97 S.Ct. 1305, 51 L.Ed.2d 604.) "[W]here those state laws conflict . . . with other legislation passed pursuant to the Property Clause, the law is clear: The state laws must recede." (*Kleppe v. New Mexico, supra*, 426 U.S. at 543, 96 S.Ct. at 2293–2294.)

AFFIRMED.

4. Before its 1978 amendment, section 30 provided in pertinent part:

"Each lease shall contain provisions for the purpose of insuring the exercise of reasonable diligence, skill, and care in the operation of said property; a provision that such rules for the safety and welfare of the miners and for the prevention of undue waste as may be prescribed by said Secretary shall be observed, including a restriction of the workday to not exceeding eight hours in any one day for underground workers except in cases of emergency; provisions prohibiting the employment of any boy under the age of sixteen or the employment of any girl or woman, without regard to age, in any mine below the surface; provisions securing the workmen complete freedom of purchase; provisions requiring the payment of wages at least twice a month in lawful money of the United States, and providing proper rules and regulations to insure the fair and just weighing or measurement of the coal mined by each miner, and such other provisions as he may deem necessary to insure the sale of the production of such leased lands to the United States and to the public at reasonable prices, for the protection of the interests of the United States, for the prevention of monopoly, and for the safeguarding of the public welfare. None of such provisions shall be in conflict with the laws of the states in which the leased property is situated."

Section 32 provides:

"The Secretary of the Interior is authorized to prescribe necessary and proper rules and regulations and to do any and all things necessary to carry out and accomplish the purposes of this chapter, also to fix and determine the boundary lines of any structure, or oil or gas field, for the purposes of this chapter. Nothing in this chapter shall be construed or held to affect the rights of the States or other local authority to exercise any rights which they may have, including the right to levy and collect taxes upon improvements, output of mines, or other rights, property, or assets of any lessee of the United States."

5. *See, e. g.*, National Environmental Policy Act, 42 U.S.C. §§ 4321 *et seq.*; Guidelines of the Council on Environmental Quality, 40 C.F.R., Part 1500; Executive Order Number 11514, 35 Fed.Reg. 4247, March 5, 1970.

Mississippi Power & Light Co. v. Nuclear Regulatory Commission

Nos. 78-1565, -1871, -2200 (5th Cir. Aug. 24, 1979)

The Fifth Circuit Court of Appeals upholds the Nuclear Regulatory Commission's (NRC's) schedule of fees for the recovery from license applicants of the costs of processing license applications and conducting safety inspections and environmental reviews. The case law interpreting Title V of the Independent Offices Appropriation Act indicates that this statutory provision empowers the NRC to assess a fee for its activities which bestow a special benefit upon an identifiable party. The court rules that the NRC has full authority to assess fees against license applicants under the statute because a license is a prerequisite to operating a nuclear facility and thus confers a special benefit upon the licensee. The court then holds that the NRC is not required to segregate the public and private benefits that flow from a particular action and charge applicants only for the latter. The Commission may recover the full cost of providing a

United States Department of the Interior

OFFICE OF THE SOLICITOR
WASHINGTON, D.C. 20240

DEC 8 1983

BLM.ER.0250

Memorandum

To: Deputy Assistant Secretary Griles
Land and Water Resources

From: Associate Solicitor, Energy and Resources

Subject: Ventura County and the "applicable local laws" stipulation

The Bureau of Land Management currently includes a stipulation in coal leases providing that the "Lessee shall comply with all valid and applicable laws and regulations of Federal, State and local governmental authority." This stipulation was adopted in October 1980 for inclusion in leases sold at the first regional coal lease sales under the existing coal leasing program. Governor Lamm has requested in connection with our development of a prototype oil shale lease that the stipulation in that lease include a list of the state and local laws we consider "valid and applicable." This memorandum discusses whether such a listing is necessary to assure that lessees will be subject to valid state and local laws. We conclude that it is not, although it is certainly permissible if you conclude that it would be wise as a matter of policy.

The Current Stipulation

The Secretary explained the purpose of the stipulation now in use in his decision to use it. Secretarial Issue Document (SID), Coal Leasing in the Green River-Ham's Fork Region 69 (October 1980). First, the words "valid and applicable" preserve to lessees (and the United States) the right to challenge local laws that "impermissibly conflict with" coal development authorized by the lease, and to establish that the local law is, to the extent of the conflict or inconsistency with federal directives, not "valid and applicable." Second, the stipulation makes it clear that the lessee "is not free, by virtue of possession of the Federal lease, to ignore State and local laws enacted for the benefit of the [local] citizens . . .." SID, supra.

This stipulation was adopted after discussion with the staffs of both Governors Lamm and Herschler. SID, supra at 18, 22. Secretary Andrus did not choose the stipulation language offered by the State of Colorado to deal with this issue. Colorado's proposed stipulation failed to include the qualifying language

"valid and applicable" in making state and local laws applicable to lease activity. SID, supra at 11-12. In other words, it did not serve the first of the two purposes the Secretary implemented in his decision.

The State was worried at that time that state and local law, including land use, facility siting and environmental laws had been rendered inapplicable to the activity of federal mineral lessees by a March 1980 Supreme Court decison. Ventura County v. Gulf Oil Co., 601 F.2d 1080 (9th Cir. 1979), aff'd without opinion, 445 U.S. 947 (1980). (See attachment). The adoption of the stipulation was designed to establish the Department's policy in response to the Court's decision, namely, that state and local laws do apply to lessees unless the local law prohibits accomplishment of the federal purpose, i.e., development of federal minerals consistent with the Mineral Leasing Act.

The Ventura County Decision

In Ventura County, supra, the court of appeals held that Ventura County's open space land use permitting ordinance could not permanently or temporarily prohibit Gulf from drilling a federally-approved well on its federal oil and gas lease in Los Padres National Forest. The court held that the County was trying to "substitute its judgment" on a federally-authorized use of federal land despite an "extensive federal [permitting] scheme reflecting concern for the local environment as well as development of the nation's resources." 601 F.2d at 1084. This office has viewed the case as standing for the proposition that local zoning and land use permitting ordinances cannot be used to prohibit exploration or development of a federal mineral lease when the proposed activity is consistent with the mineral lease and applicable federal permitting regulations. It was the County's assertion of "veto power over the Government's lessee" that the Court refused to sustain. Id. In our view, the County's power merely to regulate the lessee's activities was not squarely at issue.

States and localities, however, have been concerned that federal lessees will assert the case as a bar to any application of local permitting laws, that is, lessees will assert that they are immune from and may simply ignore local permitting. To forestall just such an assertion, Secretary Andrus adopted the stipulation now in use. The stipulation binds the lessee by contract to abide by local laws. It grants "immunity" to the lessees only to the extent that the local laws seek to prohibit, rather than regulate or mitigate, lease acitivity. We are satisfied that this is an appropriate exercise of the Secretary's power under 30 U.S.C. § 187 to impose in federal mineral leases such terms as he

deems necessary "for the protection of the interests of the United States . . . and for the safeguarding of the public welfare."

Listing Applicable Laws

The State of Colorado is now requesting that a list of applicable laws be established, and attached as a stipulation to the proposed prototype oil shale lease. The request is motivated by the State's desire for clear "public understanding" of the Department's policy. The Department may, of course, compile and attach such a list to the lease as a collection of existing local laws governing types of conduct likely for a federal oil shale lessee. If that is done, however, we should be clear to announce our intention: is the list a courtesy public notice; or is it a change in the Department's policy on the meaning of "valid and applicable" in the original stipulation, as explained in the October 1980 policy decision. Further, if a list is attached, we would need to treat expressly the applicability of later-enacted state and local laws and regulations under those laws.

With or without a list, however, it may be appropriate in view of Colorado's request to revise the existing stipulation to express more clearly our intention that state and local law is not applicable when it is used to prohibit lessee's activity necessary to achieve the Departmental purpose in lease issuance. The stipulation might read:

> The lessee shall comply with all state and local laws governing any class of activity undertaken on the lease in exercise of lease rights, including permit and license laws, except that such laws apply only to the extent that the administering governmental entity reasonably regulates the lessee's conduct on this lease, and does not prohibit the lessee's exercise of the right to beneficial use granted, consistent with the Mineral Leasing Act, by the lease.

We are prepared to provide further advice on this subject at your request.

Lawrence J. Jensen

Lawrence J. Jensen
Associate Solicitor
Energy and Resources

Attachment

EXHIBIT 11

April 3, 1985

BLM.RM.0479

MEMORANDUM

TO: State Director, Bureau of Land Management, Denver, Colorado

FROM: Regional Solicitor, Rocky Mountain Region

SUBJECT: Protest of Piceance Basin RMP

Your staff recently delivered to our office copies of protests filed by the Rio Blanco County Board of Commissioners (the County) and the AGNC (Associated Governments of Northwest Colorado). Those two organizations have protested the adoption by the Bureau of the Proposed Resource Management Plan and Final Environmental Impact Statement for the Piceance Basin (RMP). The County specifically protests the deletion of a provision from the RMP which would require future oil shale lessees and "the affected governments" to develop a mutually agreeable socioeconomic impact mitigation plan at the time the lessee submits its Detailed Development Plan. It also proposes that a stipulation requiring oil shale lessees to:

> ". . . comply with State or local law and regulations concerning the lease activities on Federal lands, as long as such law or regulations do not prohibit the lease itself or the lease activity as a sanction for violation for such law or regulation."

The AGNC's protest is generally supportive of the one filed by the County. It suggests, however, that all oil shale leases contain the following stipulation:

> "The lessee shall comply with all State and local laws governing any class of activity undertaken on the lease in exercise of lease rights, including permit and license laws, except that such laws apply only to the extent that the administering governmental entity reasonably regulates the lessee's conduct on this lease, and does not prohibit the lessee's exercise of the right to beneficial use granted, consistent with the Mineral Leasing Act, by the lease."

The principal difference between the two proposed stipulations is that the AGNC version includes a provision requiring reasonable regulation by State and local governments. The County's version would allow all regulation provided it did not result in absolute prohibition of development activities.

The AGNC's proposed stipulation was suggested by the Associate Solicitor, Division of Energy and Resources, in a December 8, 1983, memorandum to Deputy Assistant Secretary Griles as a possible alternative to a stipulation that the Bureau of Land Management (BLM) had inserted in some coal leases at that time.

The AGNC asserts that without the above-quoted stipulation or something similar to it, the RMP will be inconsistent with Rio Blanco County land use laws and, for this reason, would not meet the requirements of 43 CFR 1610.3-2(a).

The BLM's justification for changing the proposed stipulation in the final RMP is supported by the law. As proposed, the stipulation requires State and local agreement that an oil shale lessee's proposed socioeconomic impact mitigation plan is adequate. Absent that agreement, a lessee will be unable to proceed with the development of the leased oil shale deposits, thus frustrating a congressionally approved use of Federal lands. It is precisely this sort of veto power over a Congressionally approved activity, the leasing and developing of Federally owned oil shale deposits, that the courts, in Ventura County v. Gulf Oil Co., 601 F.2d 1080 (9th Cir. 1979), aff'd without opinion, 445 U.S. 947 (1980), concluded was prohibited.

On the other hand, the experience gained through the administration of the Department's Prototype Oil Shale Leasing Program indicates there may be some merit to the County's argument that the time for submitting a socioeconomic impact mitigation plan may not necessarily be when the Detailed Development Plan is submitted. A stipulation providing for the submission of a "cooperatively developed" mitigation plan (or plans) at a mutually agreeable time (or times) could be inserted in an oil shale lease to satisfy the County's concerns.

The protests submitted by the County and the AGNC suggest those organizations misapprehend the ruling in the Ventura County decision, supra, and the Associate Solicitor's explanation of that ruling. Both the Court and the Associate Solicitor conclude that State and local Governments cannot impose laws and regulations "impermissibly conflicting with achievement of a congressionally approved use of Federal lands," Ventura County v. Gulf Oil Co., supra at 1086. Thus, the Associate Solicitor concluded that a stipulation then being inserted in coal leases could be changed "to express more clearly our intention that State and local law is not applicable when it is used to prohibit lessee's activity necessary to achieve the Departmental purpose in lease issuance."

Unfortunately, the County, focusing on the word "prohibit," has taken the position that anything short of absolute prohibition is a legitimate exercise of State and local regulatory authority.1/ This is, however, not the ruling of the Ventura County decision, supra. That case rules out State and local laws impermissably conflicting with the achievement of a congressionally approved used, not simply those which prohibit such use.

To avoid confusion in the future, we propose that the stipulation suggested by the Associated Solicitor be revised to more clearly reflect the ruling of the Ventura County decision, supra. The stipulation could read as follows:

> The lessee shall comply with all State and local laws governing any class of activity undertaken on the lease in the exercise of lease rights, including permits and license laws, except that such laws apply only to the extent they do not impermissably conflict with the achievement of a congressionally approved use of Federal lands.

The County will, no doubt, find the above-suggested stipulation less than satisfactory as it does not list or attempt to define laws which "impermissably conflict with the achievement of a congressionally approved use of Federal land." We have made no attempt to compile such a list or to provide such a definition because we believe it cannot realistically be done. Neither do we believe it would be especially helpful to attempt to generally categorize impermissably conflicting laws. The attempt by the Associate Solicitor to categorize by stating laws which do not prohibit do not impermissably conflict, was promptly misconstrued. Moreover, even a facially acceptable law may be applied in such a manner as to impermissably conflict with a congressionally approved use of Federal land.

With regard to the AGNC's association that failure to include a stipulation requirement similar to the one suggested by the Associate Solicitor would violate 43 CFR 1610.3-2(a), that regulation requires consistency between resource management plans and local land use plans only to the extent the local plans are "consistent with the purposes, policies, and programs of Federal laws and regulations applicable to public lands." Moreover, the

---

1/ It is interesting to note that a "Socio-Economic Impact Mitigation Agreement" initially proposed by Rio Blanco County for the Cathedral Bluffs Shale Oil Company (the C-b lessees) pursuant to Rio Blanco County's "Major Development Permit Ordinance" required Cathedral Bluffs to pay for many specific projects in Rio Blanco County, few, if any, of which are located on lands covered by the C-b lease, as a condition for receiving the Permit and required a $5,000,000 irrevocable letter of credit or an escrow deposit in that amount as security for performance. We are advised that Cathedral Bluffs has refused to sign the proposed Agreement.

stipulation we have proposed is no different in effect than the one proposed by the Associate Solicitor, one that the AGNC found to be acceptable.

If you have additional questions regarding this matter, please contact the undersigned.

Lowell L. Madsen
For the Regional Solicitor
Rocky Mountain Region

cc: Acting Deputy Associate Solicitor, Division of Energy and Resources

LLMadsen:jan 4-2-85

Discussion of Blackhawk Coal Company, 68 IBLA 96 (1982) and Section 30 of the Mineral Leasing Act

In Blackhawk, the Board of Land Appeals (IBLA) applied section 30's public welfare clause to determine whether a particular BLM coal lease stipulation (appearing on a standard BLM lease form) exceeded the Secretary's section 30 authority. The relevant part of section 30 of the MLA, 30 U.S.C. 187 (1982), reads as follows: "Each [mineral] lease shall contain . . . such other provisions as [the Secretary] may deem necessary . . . for the safeguarding of the public welfare."

Blackhawk involved the lessee's challenge to certain terms of a readjusted coal lease. BLM proposed, in section 12 of the readjusted lease, that the lessee be responsible for avoidance and/or repair of damages on non-Federal land in the vicinity of the lease that would result from operations on the lease. Blackhawk thus addressed the mitigation of off-lease impacts of Federal mineral lease development activities, even though the impacts addressed were physical damages to land, not social and economic impacts.

Both the majority and the dissenting opinions turned on an interpretation of the "public welfare" clause of section 30 of the MLA. The majority interpreted section 30 not to authorize imposition, on Federal lessees, of liability for damages to private property not underlain by Federal coal deposits. The majority determined that the public welfare provision did not justify "BLM's effort to assume jurisdiction of a lessee's legal liabilities to owners of private ('non-Federal') land who assert purely private tort

claims." 68 IBLA at 102-103. The majority stated that the mitigationstipulation at issue was not authorized under section 30 but related to a matter generally reserved to State law - private tort actions which arise from physical damage to another's property. In addition, the majority found the proposed stipulation too vague to be enforceable.

The partially dissenting opinions interpreted the section 30 public welfare authority of the Secretary more broadly. Judge Irwin read the public welfare clause of section 30 to include general environmental protection. He also cited several other statutues applicable to Federal coal leasing activities, and concluded that:

> Individually and together, these four [FCLAA, SMCRA, FLPMA, and NEPA] are sufficient basis for the conclusion that off-site impacts on both public and private lands of mining coal under a Federal lease must be analyzed before the lease is issued and regulated afterwards.

68 IBLA at 117. (Judge Irwin, concurring in part and dissenting in part).

In Judge Burski's partial dissent, he agreed with Judge Irwin's analysis of section 30 but noted that:

> [T]he statutory language directing the Secretary to include, in every lease, provisions 'to safeguard the public welfare' [does not] give the Secretary a roving commission to include any provision in a coal lease, regardless how attentuated a relationship it might have to the purposes of the lease. Rather, I believe that any such provision must have a nexus to the subject of the lease itself, in this case development of coal deposits.

68 IBLA at 117. (Jusge Burski, dissenting in part). Judge Burski dissented because he felt the majority, in interpreting section 12(b)(1) of the standard coal lease form (which required the lessee to "repair damage to (1) any forage or timber growth on Federal or non-Federal lands in the vicinity of

the leased land"), failed to distinguish between what the Secretary could do through section 12(b)(1) as it related to his section 30 authority and "what the Secretary might be well-advised to do and makes the latter standard the test for determining the extent of Secretarial Authority." 68 IBLA at 117.

If BLM were to impose more specific physical mitigation stipulations for nearby off-lease areas because of specific projected off-lease impacts of Federal lease mineral development, the Board might uphold such stipulations. However, the Board has not yet reviewed off-lease socioeconomic lease stipulations imposed to mitigate projected mineral lease development impacts.

At a minimum, if such stipulations required lessees to comply with all State and local regulations and such regulations included socioeconomic requirements, the holding in Ventura County would not allow such conditions if they impermissibly conflicted with the federally authorized use; i.e., with mineral development on the lease.

The Blackhawk case is shown in Exhibit 12.

EXHIBIT 12

IN REPLY REFER TO:

United States Department of the Interior

OFFICE OF HEARINGS AND APPEALS
INTERIOR BOARD OF LAND APPEALS
4015 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22203

BLACKHAWK COAL CO.

IBLA 82-519 Decided October 26, 1982

Appeal from the decision of the Utah State Office, Bureau of Land Management, imposing certain readjusted terms and conditions on coal leases. Salt Lake 029093-046653, Utah 058184, and U-25484.

Affirmed in part, reversed in part, and remanded.

1. Coal Leases and Permits: Leases--Mineral Leasing Act: Generally

   The Board of Land Appeals will not reverse as unreasonable a readjustment of an underground coal lease establishing a royalty of 8 percent, since the lessee may seek further rate relief under 30 U.S.C. § 209 (1976) if needed.

2. Coal Leases and Permits: Leases--Mineral Leasing Act: Generally

   A decision proposing a provision in a readjustment coal lease for suspension of continued operations upon the payment of advance royalty will not be reversed merely because it makes the terms and conditions of the payments the subject of a future agreement.

3. Coal Leases and Permits: Leases--Mineral Leasing Act: Generally

   The Bureau of Land Management may properly include provisions requiring submission of new mining and exploration plans in a readjusted coal lease even though a mining plan has been approved, since new or revised plans may be needed for other mineable coalbeds or because rock conditions may require mining changes.

4. Coal Leases and Permits: Leases--
Environmental Quality: Generally--
Mineral Leasing Act: Generally

A provision in a readjusted coal lease requiring the lessee to conduct operations so as to avoid damage "to non-Federal lands in the vicinity of the leased lands," and "where practicable, to repair" such damage as does occur, subject to the approval of the lessor, is improper, unenforceable, and void.

5. Coal Leases and Permits: Leases--
Environmental Quality: Generally--
Mineral Leasing Act: Generally

It is proper to include in a readjusted coal lease a provision requiring the lessee to conduct at its own expense a survey and inventory archaeological and paleontological values prior to approval of a mining plan or any activity that would disturb the surface of the land.

6. Coal Leases and Permits: Leases--Mineral Leasing Act: Generally

It is proper to include a provision in a readjusted coal lease which reserves to the United States the right to authorize other uses of the leased lands that do not unreasonably interfere with the exploration and mining operations of the lessee, even though it contains no express provision for notification to the lessee, since any authorized use would be subject to the lease.

7. Coal Leases and Permits: Leases--Mineral Leasing Act: Generally

Under 30 U.S.C. § 187 (Supp. II, 1978), a coal lease must include a provision requiring twice-monthly payment of wages in the absence of a showing that compliance with the provision would place the lessee in violation of state law.

8. Coal Leases and Permits: Leases--
Environmental Quality: Generally--
Mineral Leasing Act: Generally

A readjusted coal lease may properly require that buildings and surface structures be painted in a color which conforms or blends with the natural color of the surrounding area in order to mitigate negative visual impacts in a nearby recreation area where the lessee fails to establish that compliance with the requirement is not infeasible.

APPEARANCES: Hugh C. Garner, Esq., Salt Lake City, Utah, for appellant.

OPINION BY ADMINISTRATIVE JUDGE STUEBING

Blackhawk Coal Company (Blackhawk) has appealed from the January 26, 1982, decision of the Utah State Office, Bureau of Land Management (BLM), overruling Blackhawk's objections to proposed terms and conditions of coal leases Salt Lake 029093-046653, U-058184, and U-25484, and readjusting the terms of those leases effective November 1, 1981. The leases were issued to appellant's predecessor in interest on June 17, 1921, under the provisions of section 7 of the Mineral Leasing Act of 1920, 30 U.S.C. § 207 (1976), which provides that the United States may readjust the terms of those leases at the end of 20 years. 1/ On August 4, 1981, appellant's immediate predecessor in interest was notified of the proposed readjustment of the leases. Blackhawk timely filed objections to certain proposed readjustment terms. BLM's decision overruling those objections is the subject of this appeal.

Blackhawk objects to the imposition of a production royalty of 8 percent of the value of coal produced by underground methods by proposed section 6 and offers some economic arguments why this rate is unduly burdensome. The decision below pointed out that the Mineral Leasing Act requires a royalty rate of 12.5 percent, "except the Secretary may determine a lesser amount in the case of coal recovered by underground mining operations." 30 U.S.C. § 207(a) (1976). The decision further pointed out that 43 CFR 3473.3-2(a)(3) provides for a royalty of not less than 8 percent of the value of coal removed from an underground mine, except that the authorized officer may determine a lesser amount, but in no case less than 5 percent if conditions warrant. A lessee may apply for relief from the royalty rate established in the lease under 30 U.S.C. § 209 (1976); 43 CFR 3473.3(d)(2).

1/ Salt Lake 029093 and Salt Lake 046653 were combined into one lease. Leases U-058184 and U-25484 resulted from partial assignments of land from the combined lease.

Appellant contends that it is arbitrary and capricious to designate a royalty rate by regulation without assessing a company's economic capability to support such a rate. Appellant points to 43 CFR 3473.3-2(a)(1) which states that royalty rates shall be determined on an individual case basis prior to lease issuance, citing Rosebud Coal Sales Co. v. Andrus, No. C79-160B, slip op. at 15-16 (D. Wyo. 1980), aff'd, 667 F.2d 949 (10th Cir. 1982). Appellant contends that in proposing the 8 percent production royalty, the Department has given no consideration to variations in mining conditions, geography, labor markets, or transportation.

[1] Departmental regulation 43 CFR 3473.3-2 provides two ways of granting underground coal lessees relief from the statutory 12-1/2 percent royalty. Subsections (a)(1) and (a)(3) implement 30 U.S.C. § 207(a) (1976) and provide that a rate as low as 5 percent may be determined at lease issuance. Alternatively, the Department may establish a royalty rate in the lease and provide relief after lease issuance upon application of the lessee under subsection (d), which implements 30 U.S.C. § 209 (1976). Appellant has not persuaded us that it is unreasonable to establish an 8 percent royalty rate in the lease now, since the rate may temporarily be reduced later if conditions warrant. If a lower rate is put into the lease now and economic conditions change favorably during the term of the lease, there will be no opportunity for upward adjustment of the royalty figure until the lease is again ripe for readjustment. The method chosen by BLM thus assures the United States a fairer return over the life of lease, provides appellant some relief from statutory 12-1/2 precent rate, yet affords appellant an opportunity for further royalty relief when it is really needed. We previously have affirmed BLM decisions denying special royalty relief at lease readjustment, requiring lessees to seek such relief under 43 CFR 3473.3-2(d). Lone Star Steel Co., 65 IBLA 147 (1982); Garland Coal and Mining Co., 49 IBLA 400 (1980).

[2] Appellant objects to section 7 which implements the Department's authority to "suspend the condition of continued operation upon the payment of advance royalties." 30 U.S.C. § 207(b) (1976). Previously, a definite figure for the advance royalty could be determined from the lease. Section 7, however, provides as follows:

> Upon request by the lessee the Mining Supervisor may accept, for a total of not more than ten years, the payment of advance royalties in lieu of the condition of continued operation for any particular year. Any payment of advance royalties in lieu of continued operation shall be pursuant to an agreement, signed by the lessee and the Mining Supervisor, which shall be made a part of this lease. The agreement shall include a schedule of payments and shall be subject to the advance royalty conditions set forth in the regulations. The advance royalty shall be based on a percent of the value of a minimum number of tons which shall be determined on a schedule sufficient to exhaust the leased reserves in 40 years from the date of approval of the mining and reclamation plans or from June 1, 1976, depending on effective date of the lease.

Appellant finds this exception unacceptable because it contemplates that the parties, without knowing the terms and conditions, are agreeing to agree to something at a future date. The decision below fully responds to this objection as follows:

> Section 7 of all coal leases is inserted to comply with Section 7(b) of the MLLA. In its objections to this lease stipulation, the lessee appears to be overlooking two points. First, the lessee, not the Mining Supervisor, requests that advance royalties be paid. The lessee may not wish to pay advance royalties in lieu of continued operation and thus may not ever need to exercise the provisions of Section 7. Second, Section 7 generally outlines the terms of any advance royalty agreement. The agreement "shall include a schedule of payments" and "shall be based on a percent of the value of a minimum number of tons which shall be determined on a schedule sufficient to exhaust the leased reserves in 40 years..." If the regulations about advance royalties (43 CFR 3473.3-2(b)) change, then those regulations would apply to the leases under their current language.

We see no reason to reverse BLM's decision with respect to section 7.

[3] Appellant objects to sections 9 and 10 which require submission of exploration and mining plans, contending that those sections are inapplicable since the mining plan has already been appproved. We accept BLM's reason for overruling the objection:

> Although these leases are currently under production, unforeseen circumstance may require future exploration to obtain additional data on the coal deposits. There is also the remote possibility that operations could terminate along with the mining plan. Should the lessee then wish to resume mining operations on the leases, new mining plans would be required. Absent a requirement for such plans, the lessee might argue that it was not required to submit mining plans under its leases. In addition mining plans approved relate to coal beds that are currently under production. For other minable coal beds on these leases new or revised mining plans will be required. It is also necessary to revise mine plans as rock conditions may require mining changes. In addition, if the lessee has submitted exploration and mining plans which have been approved and no further changes would occur, then including Sections 9 and 10 in these leases should be harmless.

[4] Section 12 of the proposed readjustment of the lease concerns operations on the leased lands. Subsection (b) provides:

> The lessee shall conduct operations in such a manner as may be needed to avoid or, where avoidance is impracticable, to minimize and where practicable, to repair damage to: (1) any forage or timber growth on Federal or non-Federal lands in the vicinity of the leased lands; (2) crops, including forage and timber, or

> improvements of a surface owner; or (3) improvements, whether owned by the United States or by its permittees, licensees, or lessees. The lessor must approve the steps to be taken and the restoration to be made in the event of the occurrence of damage described in this subsection. [Emphasis added.]

Appellant objects only to the extension of the terms of section 12(b)(1) to include non-Federal lands, and questions the authority of the Government to impose such limitations on a lessee in favor of unnamed, unidentified third parties. As authority for this provision, BLM cites 30 U.S.C. § 187 (Supp. II, 1978), which authorizes lease provisions "for the safeguarding of the public welfare."

Appellant's objection to this provision is well taken insofar as it relates to damage or claims of damage to "non-Federal lands in the vicinity of the leased lands" resulting from the Federal lessee's operations. The most reasonable construction of this provision is that only "forage and timber growth" on off-lease private premises are intended to be protected, because the reference to "crops, including forage and timber or improvements" must belong to "a surface owner" (presumably of the leased premises), and the the only other protected "improvements" are those "owned by the United States or by its permittees, licensees, or lessees." Therefore, the crux of our concern with this provision is centered upon BLM's authority to require the lessee to avoid or minimize damage to any forage or timber growth on non-Federal lands in the vicinity of the leased lands, and to require the lessee, "where practicable," to repair any such damage "where avoidance is impracticable."

There is a great deal wrong with this provision. First, it appears to put the Department's stamp of approval on its lessee's operations which damage a neighboring private landowner's forage and timber "where avoidance" of such damage "is impracticable," so long as such damage is minimized, and the lessee "repairs" it "where practicable." This Department has no right to authorize, allow, sanction or acquiesce in any contemplated damage to any third party's property by its lessee -- not even if the lessee agrees to hold such damage to a minimum "where avoidance is impracticable," and further agrees to repair the damage that occurs, unless, of course, the repairs are considered "impracticable." Such a cavalier attitude by the Department with respect to damage on "non-Federal lands in the vicinity" surely cannot reflect established Departmental policy; and it can hardly be regarded by the landowners in the vicinity as an expression of benign good will, or as protection of their interests.

Moreover, where a provision is included in a Federal coal lease, it devolves on the Secretary to enforce it. If a private landowner in the vicinity of the leased premises complains that the lessee's operations have damaged his trees or his forage, and the lessee disclaims liability, what then? Will the administrator, in furtherance of his obligation to enforce the lease terms, investigate the damage claims and undertake to adjudicate their merits? If he concludes that the lessee's operations did in fact cause the damage complained of, will he then assess the amount, extent, and degree of such damage where disputed between the parties as, for example, where a

fire has caused some damage to grass and trees? Will he decide what will be required of the lessee "to repair" such damage in order to avoid noncompliance with the lease provision? Will he threaten cancellation or suspension of the lease if the lessee refuses to accept liability or to undertake the "repair" ordered by the administrator? If the administrator is not going to function in the foregoing fashion to ensure compliance with the lease provision, what purpose does the provision serve? If he is going to engage in the adjudication of private damage claims against the lessee, he is intruding into an area of endeavor where he does not belong. Tort claims between private parties can only be resolved by the parties themselves, their insurance companies, their attorneys, or in the courts, and the fact that one of the parties happens to be a Federal coal lessee should not constitute a basis for bureaucratic interposition.

There is no need to insert in a coal lease a provision which requires the lessee to operate in such a way as to avoid nonspecific tortious conduct with respect to non-Federal entities, unless, of course, the Congress has imposed upon the executive agency a statutory responsibility to regulate in that area, which it has not done. The obligations, rights, and remedies relating to tortious acts between private parties are firmly established and deeply rooted in the civil law, and require no gratuitous involvement of the Department of the Interior.

This situation is distinguishable from certain of those cases where this Department has required a Federal lessee or grantee to avoid certain damage to private lands, or to rehabilitate private lands where damage was unavoidable. There are three distinctions between that line of cases and the instant case. First, the requirements were imposed either for the protection of associated Federal property or for the protection of a broad public interest, e.g., the environment. Second, the requirements were specific, i.e., the reseeding of disturbed lands, protection of archeological values, fire protection measures, etc. Third, the imposition of the requirement had a statutory premise in each instance. Grindstone Butte Project, 24 IBLA 49 (1976), aff'd, Grindstone Butte Project v. Kleppe, 638 F.2d 100 (9th Cir. 1981), cert. denied, U.S. ; Cominco American, Inc., 26 IBLA 329 (1976). See General Crude Oil Co., 28 IBLA 214, 83 I.D. 666 (Stuebing, A.J. dissenting, joined by Henriques, A.J., and Fishman, A.J.). By contrast, the provision in the instant case (insofar as it is applicable to private lands) has no nexus either to the protection of Federal property or the broad public interest, is nonspecific and ambiguous in the imposition of the lessee's obligations, and is not a statutory function of the Department of the Interior. Cf. Kleppe v. New Mexico, 426 U.S. 529 (1976) (where the Secretary's jurisdiction over wild horses and burros on private lands was found to derive from a statute held valid under the property clause of the Constitution).

We have reviewed the dissenting opinions on this issue, and we remain unpersuaded that the statutory admonition to "safeguard the public welfare" affords adequate justification for BLM's effort to assume jurisdiction of a

lessee's legal liabilities to owners of private ("non-Federal") land who assert purely private tort claims. We find nothing wrong with the provision to the extent that it protects Federal lands and interests, but that portion of the provision was not challenged by appellant, and is not at issue in this case. The dissenters cite other Federal statutes that impose various "public interest" obligations on BLM and its lessees, such as the protection of the environment. However, strands from those statutes may not be woven into an elastic blanket of law which then can be stretched to cover private tort claims by third-party landowners against private lessees of Federally-owned mineral deposits.

Therefore, we hold that the lease provision, section 12(b)(1), is unenforceable and void insofar as it pertains to damage "on non-Federal lands in the vicinity of the leased lands," and that BLM improperly overruled the company's objection.

[5] The proposed lease contains three provisions for the protection of cultural and paleontological resources. Section 13 authorizes a survey of the leased land by a qualified archaeologist to provide an inventory of any historical, cultural, archaeological, and paleontological values. Subsection (a) provides that the cost of the survey or measures to protect such values discovered as a result of the survey shall be borne by the lessee, and that items and features of historical, cultural, archaeological, or paleontological value shall remain under the jurisdiction of the United States. Subsection (b) provides that if any items of such value are discovered during during lease operations, the lessee must notify the mining supervisor. That subsection provides that if the lessee is ordered to take measures to protect any items discovered, the cost shall be borne by the lessor. 2/

Section 31 of the proposed lease sets forth several stipulations. Stipulation 5 requires a cultural resource intensive field inventory before undertaking activities that may disturb the surface of the lease lands. The cost of the inventory, reporting, and mitigation measures shall be borne by the lessee. Subsection (d) of stipulation 5 makes essentially the same provisions as subsection (b) of section 13 of the lease. Stipulation 6 generally makes similar provision for protecting paleontological values as stipulation 5 provides for cultural resource values.

Appellant objects to section 13 as inapplicable, since a mining plan for these leases has been heretofore submitted and conditionally approved while the section is a condition precedent to the approval of a mining plan. We note, however, that section 13(a) also provides that the continuation of lease operations may be conditioned on the approval of the survey report and the approval of measures to protect the historical, cultural, archaeological,

2/ This provision offers no clear justification why the lessee must bear the cost of protecting these values if found during the survey while the Government would bear the cost of measures to protect them if discovered during lease operations.

and paleontological values. Appellant makes a similar objection to stipulation 5. Appellant further objects to the imposition of the costs of a survey for these values and the measures necessary to protect them. In General Crude Oil Co., supra, and Cecil A. Walker, 26 IBLA 71 (1976), the Board reviewed an oil and gas lease stipulation which required the lessee to provide for a survey of the land for archaeological values and protect such values at cost to the lessee. After making a detailed analysis of legislation concerning cultural resource values on the public lands, the Board sustained the stipulation. However, because multiple provisions in the coal lease conflict in assigning responsibility for the cost of protecting and mitigating damage to cultural resources 3/ and for recovery of data, 4/ the case must be remanded to eliminate the internal conflicts between section 13 and the stipulations.

[6] Section 14 of the proposed lease reserves to the United States the right to authorize other uses of the leased lands that do not unreasonably interfere with the exploration and mining operations of the lessee. Appellant objects to this section because it has no express provision for notifying appellant of any change in the status or use of these lands. However, the decision below notes that all lessees or permittees would be notified in advance of the authorization of any other uses of the lands in the leasehold, and that the valid existing rights of all existing lessees or permittees are required to be recognized by statute, whether stated in the leases or not. Since any use of the surface would be subject to appellant's lease, we see no need for including an express notification requirement in the lease.

[7] Appellant objects to the provision in section 17 requiring that wages be paid at least twice each month to persons employed on the leased lands. Appellant contends that the lease operator employs nonminers performing administrative functions on the premises who are paid salaries on a monthly basis which is permitted under Utah law. We note that this provision is merely a restatement of a provision in appellant's prior lease, and was not substantially changed on readjustment. The requirement of paying wages twice each month has always been set forth by statute. 30 U.S.C. § 187 (1976). Although that section states that no such provision of a lease shall be in conflict with the laws of the state in which the leased property is situated, appellant has not demonstrated that compliance with this lease provision would put appellant or its operator in violation of State law. In Lone Star Steel Co., supra, we indicated that we would affirm decisions by BLM to include provisions required by statute in readjusted coal leases.

[8] Lastly, appellant objects to special stipulation 12 which requires buildings and surface structures to be painted in a color that conforms or blends with the natural color of the surrounding area. Appellant asserts

3/ Compare section 13(b) with stipulation 5(c).
4/ Costs of salvaging fossils are assigned to the United States under stipulation 6(d). However, the authorized officer of the surface management agency may specify otherwise with respect to "data recovery for cultural resources" under stipulation 5(d).

that it is not feasible to compel a coal operator who handles a black substance to paint his buildings and surface structures tan, the natural background color of the surrounding area in this case. Appellant's statement of reasons merely restates the objection submitted to BLM and offers nothing to refute BLM's reasons for overruling that objection. Those reasons, which we adopt, are as follows:

> These lease areas can be viewed from trails and overlooks around the Price Canyon Recreation Area. Therefore, due to Visual Resource Management considerations negative visual impacts shall be mitigated by imitating the form, line, color and texture of the natural landscape to the greatest extent practical as determined by the authorized officer. The feasibility argument loses merit due to the fact that the major surface structure already in use for the processing and shipping of coal as well as other coal holdings are already painted a suitable color that blends with the landscape. The visual effect does not appear to be adversely affected by the coal.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed in part, reversed in part, and remanded for further action consistent with this opinion.

Edward W. Stuebing
Administrative Judge

We concur:

Douglas E. Henriques
Administrative Judge

Anne Poindexter Lewis
Administrative Judge

C. Randall Grant, Jr.
Administrative Judge

Gail M. Frazier
Administrative Judge

ADMINISTRATIVE JUDGE IRWIN CONCURRING IN PART AND DISSENTING IN PART:

I. Introduction

I believe section 12 of the readjusted lease is authorized by law and advisable as a matter of policy. Therefore, although I concur with the balance of the majority decision, I am disappointed in their discussion and conclusion concerning this provision.

II. Legality

A. The Mineral Leasing Act of 1920

Section 30 of the Mineral Leasing Act of 1920, as amended, 30 U.S.C. 187 (Supp. II 1978), requires several mandatory provisions in a coal lease. It provides in part:

> Each lease shall contain provisions for the purpose of insuring the exercise of reasonable diligence, skill, and care in the operation of said property; a provision that such rules for * * * the prevention of undue waste as may be prescribed by the Secretary shall be observed, * * * and such other provisions as he [the Secretary] may deem necessary * * * for the protection of the interests of the United States, * * * and for the safeguarding of the public welfare. [Emphasis added.]

Section 12 of the readjusted lease is specifically based on and implements these clauses of section 30 of the Mineral Leasing Act. It reads in full:

> Sec. 12. OPERATIONS ON LEASED LANDS. In accordance with the conditions of this lease, the exploration and mining plans, the regulations and the Act, the lessee shall exercise reasonable diligence, skill and care in all operations on the leased lands. The lessee's obligations shall include, but not be limited to the following:
>
> (a) The lessee shall conduct all operations on the leased lands so as to avoid injury to life, health, or property.
>
> (b) The lessee shall conduct all operations in such a manner as may be needed to avoid or, where avoidance is impracticable, to minimize and where practicable, to repair damage to: (1) any forage and timber growth on Federal or non-Federal lands in the vicinity of the leased lands; (2) crops, including forage and timber, or improvements of a surface owner; or (3) improvements, whether owned by the United States or by its permittees, licensees, or lessees. The lessor must approve the steps to be taken and the restoration to be made in the event of the occurrence of damage described in this subsection.
>
> (c) The lessee shall minimize to the maximum extent possible wasting of the mineral deposits and other resources, including, but not limited to, surface resources which may be found in, upon, or under such lands. [Emphasis added.]

The introductory language of section 12 of the lease iterates the first-quoted clause of section 30 of the Act. Section 12(a) specifies the first obligation to avoid injury to life, health, or property; it does not limit the obligation for the benefit of life, health, and property only on the leased lands. Section 12(b) makes explicit that the lessee is obligated to exercise care for the benefit of both Federal and non-Federal lands. Section 12(b)(1) calls for damage to forage and timber on Federal and non-Federal lands in the vicinity of the leased lands to be avoided or minimized and repaired; section 12(b)(2) is designed to safeguard the crops and improvements of a surface owner, not limited to the surface owner of the leased lands; section 12(b)(3) is designed to protect the interests of the United States in improvements owned by it or its lessees, not limited to improvements on the leased lands. Section 12(c) implements the clause of section 30 concerning rules to prevent undue waste, not limiting the obligation to the leased lands for either mineral deposits or surface resources.

What the majority finds troubling about section 12 of the lease is its coverage of non-Federal, that is, private land, not only the private land over the leased coal but also neighboring private lands. Section 30 of the Act does not distinguish between lease provisions for the benefit of public lands, private lands, or private lands near public lands. Its language is general and, in my view, may be applied to prevent undue waste, protect the interests of the United States, and safeguard the public welfare wherever there is a reasonable nexus with operations on the leased lands. In this case there is such a nexus. In addition to considerable Federal land in the township, there are Federal coal lessees on, and reserved mineral interests beneath, private lands that are contiguous to Blackhawk's leased lands. 1/ It is reasonable, in my view, to provide for the prevention of waste of these mineral interests by requiring Blackhawk to exercise diligence, skill, and care in order, for example, not to impair future access to these minerals. It is also reasonable to protect the interests of the United States in any improvements it may have, wherever they may be, or any improvements its coal lessees, for example, may have that facilitate production under other leases on the contiguous lands. Finally, it is reasonable in my view to safeguard the public welfare by requiring diligence, skill, and care to avoid or minimize and repair damage to forage, timber, crops, or improvements on either Federal or non-Federal lands. This not only safeguards against losses of personal time and property of private citizens. It also safeguards the public's interest in the productivity of the land and the integrity of the environment against damages due to crop loss, soil erosion, and water pollution, as well as against attendant harm to area biota.

Thus, I conclude that under the specific language of section 30 of the Mineral Leasing Act the BLM may impose section 12 of the readjusted lease.

1/ The land in Ts. 12 and 13 S., R. 9 E., Salt Lake meridian, contiguous to the lands covered by the leases in this case includes lands patented without any mineral reservation, lands patented with reservation of all minerals to the United States, state indemnity lands with coal reserved to the United States, and public land. All of these contiguous public lands and the reserved coal are covered by three other coal leases, U 25683, U 25485, or SL 071737, only one of which is held by Blackhawk.

I would add that quite recently the Secretary has stated that "[u]nder section 30 of the Mineral Leasing Act, as amended, the Secretary of the Interior has authority to insert such lease terms as he/she deems appropriate for the protection of the interests of the United States and for other purposes." 47 FR 33132 (July 30, 1982). 30 U.S.C. § 207(a) (1976) contains a similarly-worded authorization. See Natural Resources Defense Council v. Berklund, 609 F.2d 553, 555 n.4 (D.C. Cir. 1979).

B. Other Statutes Governing Coal Leasing

The requirements of several other statutes directly support the inclusion of section 12.

1. Federal Coal Leasing Amendments of 1976

The Federal Coal Leasing Amendments of 1976, P.L. 94-377, 90 Stat. 1083, a bill enacted among other reasons to provide "environmental safeguards which are essential to the long term interests of the nation and the regions involved," 2/ amended the Mineral Leasing Act by adding several provisions with which section 12 of the readjusted lease is consonant. Section 3 of that Act added subsection 201(a)(3) to the Mineral Leasing Act. That subsection requires each coal lease to contain provisions requiring compliance with the Federal Water Pollution Control Act, 33 U.S.C. § 1251 (1976), and the Clean Air Act, 42 U.S.C. § 7401 (Supp. II 1978) (30 U.S.C. § 201(a)(3)(E) (1976)); requires the Secretary, prior to issuing any coal lease, to consider the effects which the proposed mining might have on an impacted community or area, including impacts on the environment, on agricultural and other economic activities, and on public services (30 U.S.C. § 201(a)(3)(C)); and proscribes any coal lease before the Secretary has prepared a comprehensive land use plan for the lands containing the coal deposits with which the proposed lease sale is compatible (30 U.S.C. § 201(a)(3)(A)). Section 6 of that Act amended 30 U.S.C. § 207 to provide that a lessee must submit for the approval of the Secretary an operation and reclamation plan prior to taking any action on a leasehold which might cause significant disturbance to the environment (30 U.S.C. § 207(c)). This latter requirement is implemented by 30 CFR 211.10(b) and (c), 47 FR 33185 (July 30, 1982).

2. The Surface Mining Control and Reclamation Act of 1977

The Surface Mining Control and Reclamation Act of 1977, P.L. 95-87, 91 Stat. 445, defines "federal lands" as "any land, including mineral interests, owned by the United States without regard to how the United States acquired ownership of the land and without regard to the agency having responsibility for management thereof" (30 U.S.C. § 1291(4) (Supp. II 1978)). The Secretary is required to implement a Federal lands program applicable to all surface coal mining and reclamation operations that take place in accordance with any Federal law on any Federal lands (30 U.S.C. § 1273(a) (Supp. II 1978)). "Surface coal mining operations" is defined to include surface impacts incident to an underground mine (30 U.S.C. § 1291(27), (28). 30 CFR

2/ H.R. No. 94-981, 94th Cong., 2d Sess. (1976), at 8. See generally id. at 18-19.

Part 211 governs surface coal mining on Federal lands, including coal under leases. 30 CFR 211.1(a) (1981). See 47 FR 33154 (July 30, 1982). The general purposes of the regulations in Part 211 as well as the specific performance standards incorporated by it are consistent with the requirements of section 12. 30 CFR 211.1(b), (g); .40 (1981). See, for example, 30 CFR 715.17 and section 717.17 ("[t]he permittee shall plan and conduct coal mining and reclamation operations to minimize disturbance to the prevailing hydrologic balance in order to prevent long-term adverse changes in the hydrologic balance that could result from the * * * operations, both on and off-site"). See also 30 CFR 715.19 and section 717.19 (use of explosives) and 30 CFR 715.20 and section 717.20 (revegetation). Peformance standards at least as stringent as these are to be applied to Blackhawk's lease in accordance with the cooperative agreement between Utah and the Department of the Interior. 30 CFR 211.77(b), art. III.C (1981). Blackhawk's surface mining permit and associated mining plan are to be approved by both the state and the Department. 30 CFR 211.3(c)(2), 47 FR 33161-62, 33182 (July 30, 1982); 30 CFR 741.4(b), 741.17(c) (1981); 30 U.S.C. § 1273(c) (Supp. II 1978).

3. The Federal Land Policy and Management Act of 1976

The Federal Land Policy and Management Act of 1976, P.L. 94-579, 90 Stat. 2743, directs the Secretary to manage public lands in accordance with the principle of multiple use. 43 U.S.C. § 1732(a) (1976). The definition of multiple use specifically provides for management "of the various resources without permanent impairment of the productivity of the land and the quality of the environment" and calls for a combination of resource uses "that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic scientific and historical values." 43 U.S.C. § 1702(c) (1976).

The Secretary is also directed to manage in accordance with land use plans developed in accordance with section 202 of the Act. That section sets forth several requirements for land use plans:

> (c) In the development and revision of land use plans, the Secretary shall—
>
> (1) use and observe the principles of multiple use and sustained yield set forth in this and other applicable law;
>
> (2) use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences;
>
> (3) give priority to the designation and protection of areas of critical environmental concern;
>
> (4) rely, to the extent it is available, on the inventory of the public lands, their resources, and other values;
>
> (5) consider present and potential uses of the public lands;

(6) consider the relative scarcity of the values involved and the availability of alternative means (including recycling) and sites for realization of those values;

(7) weigh long-term benefits to the public against short-term benefits;

(8) provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans; and

(9) to the extent consistent with the laws governing the administration of the public lands, coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local governments within which the lands are located * * *.

43 U.S.C. § 1712(c) (1976).

The Secretary is authorized to manage the use, occupancy, and development of public lands in accordance with these land use plans and with the multiple use principle through leases and is directed to take any action necessary to prevent unnecessary or undue degradation of the lands by regulation or otherwise. 43 U.S.C. § 1732(b) (1976).

4. The National Environmental Policy Act of 1969

The National Environmental Policy Act of 1969, P.L. 91-190, 83 Stat. 852, requires a detailed statement on the environmental effects of every proposed major Federal action that would significantly affect the environment. 42 U.S.C. § 4332(2)(c) (1976). Proposals to issue a lease or approve a mining plan are actions that require an environmental impact statement. Cady v. Morton, 527 F.2d 786, 793 (9th Cir. 1975). Such a statement must adequately discuss not only the environmental impact, but also the unavoidable adverse impacts of the proposed action, alternatives to it, the relationship between short-term uses of the environment and its long-term productivity, and irreversible commitments of resources from implementing the proposed action. 42 U.S.C. § 4332(2)(c)(i) through (v). A statement should also discuss measures to mitigate the effects of the proposed action. 3/ In the context of a proposed coal lease these measures include lease conditions required by the statutes summarized above as well as additional discretionary conditions. 4/

These summaries cover only four of the most important environmental statutes relevant to coal leasing. There are more than a dozen others. 5/

3/ 40 CFR 1502.14(f), .16(h); Sierra Club v. Froehlke, 359 F. Supp. 1289, 1339-41 (D. Tex., 1973), rev'd on other grounds, Sierra Club v. Callaway, 499 F.2d 982 (5th Cir. 1974); Simmans v. Grant, 370 F. Supp. 5, 17-18 (D. Tex. 1974).

4/ Department of the Interior, Final Environmental Statement, Federal Coal Management Program, April 1979, ch. 6.

5/ Id., Table 1-3 at 1-19 to 1-23.

Individually and together, however, these four are sufficient basis for the conclusion that offsite impacts on both public and private lands of mining coal under a Federal lease must be analyzed before the lease is issued and regulated afterwards. Section 12 is only one of the conditions controlling these impacts of operations under a lease, but it is a significant one, and one that is supported by these statutes.

C. Previous Decisions of the Secretary and the Board

Several decisions of the Secretary and this Board support the lease condition involved in this case.

In Montana Power Co., 72 I.D. 518 (1965), the progenitor of section 12 was approved. 6/ In that case the company objected to its application to private lands overlying its lease. In affirming the BLM decision, the Secretary said, in part:

> The appellant stresses that the Northern Pacific Railway [the principal surface land owner] has no interest in the restoration of the surface. It contends that the restoration provision should be limited to acreage the surface of which is owned by the United States. Although it is true that the United States has a greater interest in its own lands, it also has a substantial concern with lands of others in which it has reserved the minerals, together with the right to prospect for, mine, and remove the minerals * * *. Furthermore, by the end of the 20-year lease the ownership of the surface of the land may well have changed and the new owner may have a different attitude from the railroad's.

72 I.D. at 521.

In Cominco American Inc., 26 IBLA 329 (1976), the same general condition as in Montana Power was included as a stipulation to readjusting Cominco's phosphate lease and a special stipulation required the company to use crushed

---

6/ In that case the condition read:

"Protection of the surface, natural resources, and improvements. The lessee agrees to take such reasonable steps as may be needed to prevent operations from unnecessarily: (1) causing or contributing to soil erosion or damaging any forage and timber growth thereon; (2) polluting the waters of springs, streams, wells, or reservoirs; (3) damaging crops, including forage, timber or improvements of a surface owner; or (4) damaging range improvements whether owned by the United States or by its grazing permittees or lessees; and upon any partial or total relinquishment or the cancellation or expiration of this lease, or at any other time prior thereto when required by the lessor and to the extent deemed necessary by the lessor, to fill any sump holes, ditches and other excavations, remove or cover all debris, and, so far as reasonably possible, restore the surface of the leased land to its former condition, including the removal of structures as and if required. The lessor may prescribe the steps to be taken and restoration to be made with respect to lands of the United States and improvements thereon."
72 I.D. at 521 n.3.

rock and employ dust control measures on roadways and a mine yard that were located on private lands separated from the leased lands. The Board followed Montana Power in upholding conditions applicable to privately owned surface estates overlying the leased minerals. It also rejected Cominco's argument "that the Department has no authority for conditioning the modification and readjustment of the subject lease with environmental stipulations which apply to lands which do not belong to the Federal Government." 26 IBLA at 336.

In rejecting Cominco's private lands objection, the Board relied in part on Grindstone Butte Project, 24 IBLA 49 (1976). In that case several stipulations were attached as conditions to the granting of a right-of-way, including one that required reseeding of disturbed areas along irrigation canal banks on both private and public lands. BLM justified the reseeding on the basis of its belief that "impacts left unmitigated on private land would pose a threat to adjoining National Resource Lands." 24 IBLA at 56. The Board upheld BLM, stating in part:

> In the present case, the stipulations required by the BLM concern construction and maintenance requirements, monitoring the use of poisonous substances, reseeding of disturbed lands, removal of refuse, prevention of water pollution, protection of fish, protection of archeological sites, assurances of livestock mobility, and protection of hydroelectric development. We find these interests to be of proper concern to this Department both directly and through the need to cooperate with other federal and state agencies. 2/ Therefore, we reject appellant's arguments that the BLM is not empowered to require these stipulations as a condition precedent to the approval of the right-of-way applications. [Text of footnote omitted.]

24 IBLA at 51. Footnote 2 of the Board's decision enumerated several Federal laws supporting its conclusion, including the National Environmental Policy Act. On appeal the circuit court affirmed the Board and relied in part on that Act. Grindstone Butte Project v. Kleppe, 638 F.2d 100 (9th Cir. 1981). 7/ Its opinion states:

> The Secretary cites NEPA as additional authority for imposing conditions on grants of irrigation rights-of-way. NEPA made environmental protection part of the mandate of every federal agency. Calvert Cliffs' Coordinating Committee, Inc. v. AEC, 449 F.2d 1109, 1112 (D.C.Cir. 1971).
>
> Under NEPA, federal agencies have "the continuing responsibility ... to use all practicable means, consistent with other essential considerations of national policy, [to protect the environment]." 42 U.S.C. § 4331(b). Congress further mandated that, to the fullest extent possible, policies, regulations, and

7/ The court's recitation of the facts referred specifically to the stipulation requiring reseeding on private as well as public land, characterizing it as one designed to "minimize despoliation of public land by reseeding soil disturbed by construction." 638 F.2d at 101.

public laws of the United States "shall be interpreted and administered in accordance with the policies set forth" in NEPA. 42 U.S.C. § 4332.

Thus, the Secretary of the Interior is not only permitted but required to take environmental values into account in carrying out regulatory functions, see Detroit Edison Co. v. Nuclear Regulatory Commission, 630 F.2d 450 (6th Cir. 1980), unless there is a clear and unavoidable conflict of statutory authority prohibiting the Secretary from complying with NEPA's mandate. Flint Ridge Development Co. v. Scenic Rivers Ass'n, 426 U.S. 776, 787-788, 96 S.Ct. 2430, 2437-2438, 49 L.Ed.2d 205 (1976). Because we hold that the Secretary is vested with statutory authority to impose reasonable terms and conditions upon grants of irrigation rights-of-way, it is clear that no provision in the 1891 or 1901 Acts precludes the Secretary from implementing NEPA's environmental mandate. As stated above, in exercising discretion to impose terms and conditions upon rights-of-way granted over federal lands, the Secretary must comply with NEPA's mandate to protect the environment. See Detroit Edison Co., 630 F.2d at 450, 451.

638 F.2d at 103.

The majority attempts to distinguish Cominco and Grindstone Butte. The provision in this case, they say, "(insofar as it is applicable to private lands) has no nexus either to the protection of Federal property or the broad public interest, is nonspecific and ambiguous in the imposition of the lessee's obligations, and is not a statutory function of the Department of the Interior" (majority opinion, supra at 102). I am not persuaded by any of these purported distinctions. First, section 12 does have a nexus to protection of Federal interests. It protects forage and timber on nearby Federal lands (section 12(b)(1)); it protects Federal improvements, as well as those of Federal lessees, wherever they may be affected (section 12(b)(3)); and it prevents wasting reserved mineral interests underlying contiguous and nearby private lands and other Federal lands as well as other resources (section 12(c)). Section 12 also has a nexus with the broad public interest (or, in the words of section 30 of the Mineral Leasing Act, it safeguards the public welfare). In terms it provides for avoidance of injury to life, health, and property (section 12(a)). It protects both the private property value and the environmental values of forage and timber (section 12(b)(1)) and of crops (section 12(b)(2)), as well as the property value of private improvements (section 12(b)(2)). Second, the obligations imposed are no vaguer than those approved in Cominco. Concerning the general stipulation involved in that case the objection of vagueness was answered in Montana Power: the language of the surface restoration clause "is not unusual legal terminology and its interpretation should occasion no more than ordinary difficulties." 72 I.D. at 522. The terms of the special stipulation affecting private lands were not definitive ("Material should be selected with physical properties which will reduce dust production and reduce or prevent surface pooling or flow of water. Dust control measures should be taken on these areas."), although they could be more specific than some of those in section 12 because they were addressing known conditions. Third, I agree

with my colleagues that the conditions in those cases "had a statutory premise" (majority opinion, supra at 102). In Grindstone Butte, it was the Act of March 3, 1891, 26 Stat. 1101, as amended by the Act of February 15, 1901, 43 U.S.C. § 959 (1970). 8/ In Cominco it was 30 U.S.C. § 211 (1976), the provision of the Mineral Leasing Act for leasing phosphates. In this case it is section 30 of that Act, an act designed to enhance the Secretary's control over United States mineral interests, Boesche v. Udall, 373 U.S. 472, 481 (1963), that is the statutory basis of section 12.

Finally, in General Crude Oil Co., 28 IBLA 214, 83 I.D. 665 (1976), the Board decided the question whether BLM could impose as a condition precedent to the issuance of oil and gas leases a stipulation concerning protection of cultural resources that applied to patented land in which the United States had reserved mineral interests. A majority held that it could.

In my view these cases are ample precedent in support of section 12. Cf. Dean W. Rowell, 37 IBLA 387 (1978), Quantex Corp., 4 IBLA 31, 78 I.D. 317 (1971). See also Solicitor's Opinion, M 36917, 87 I.D. 27 (1979).

III. Policy Considerations.

Several policy arguments convince me that section 12 should be upheld.

A. The Purpose of Lease Readjustment

"The purpose of the lease readjustment is to bring existing leases into conformity with statutes passed and policy changes made since their issuance." 47 FR 33129 (July 30, 1982). 9/ In this case section 12 is the first change in the provision implementing section 30 of the Mineral Leasing Act of 1920 since the one contained in the original lease agreement dated June 17, 1921. 10/ Our knowledge has increased, several statutes have passed, and our policies have evolved considerably since then. Section 12 represents the current combination of that knowledge and those policies. The purpose of readjusting leases would be undermined if provisions such as this are rejected.

8/ The statutory basis for such conditions is now 43 U.S.C. § 1765 (1976).

9/ See Rosebud Coal Sales Co., Inc. v. Andrus, 667 F.2d 949, 951 (10th Cir. 1982): "A time is thus stated when the Government can 'readjust' the royalty and other terms * * *. The scope or nature of the changes is not limited and there thus exists a very broad power to make changes considered to be in accordance with the proper administration of the lands." See also Solicitor's Opinion, M-36939, 88 I.D. 1003, 1008-09 (1981).

10/ Section 4(a) of the original lease provided:

"The lessee shall carry out and observe regulations prescribed by the Secretary of the Interior and in force at the date hereof relative to (1) reasonable diligence, skill, and care in the operation of said property in accordance with approved methods and practices; (2) the prevention of undue waste; (3) the safety and welfare of miners; and (4) insuring the fair and just weighing or measurement of the coal mined by each miner."

B. The Precedent is Important

At least four other coal lease readjustment cases presently pending before the Board include the language of section 12. More importantly, however, there are literally hundreds of leases covering hundreds of thousands of acres containing billions of tons of Federal coal. In 1974 there were 533 leases covering more than 780,000 acres and involving more than 16 billion tons of coal. 11/ In addition, in 1976 there were more than 490,000 acres involving 12 billion tons of coal subject to preference right lease applications. 12/ Thus, it would be very serious if BLM could not include this provision to protect United States interests and safeguard neighboring private lands affected by all these present and future leases of Federal coal. The social and environmental impacts of mining Federal coal have been thoroughly analyzed. It is not necessary to recount them here. 13/ It is enough to say that if the Federal Government can compel private landowners to expend efforts on their land for the protection of public lands, and it can, 14/ then it is only fair for it to compel its own lessees to make similar efforts to protect the public at large and safeguard neighboring private landowners and to remedy any harm that may occur from activities under the leases. Otherwise, the good neighbor policy of BLM will become simply a slogan and a sham.

C. The Roles of Private Law and Public Agencies

The majority is apparently offended by BLM's effort to interfere in matters that should in their view be dealt with at private law and to arrogate to itself a roving commission to do good in the name of some ill-defined public interest. I disagree. Although tort and trespass law are of course the genesis of the legal response to the kinds of problems addressed in section 12, the sun has long since set on the day when they were the sole system for reallocating the burdens of economic activity in this country. Today the recurring policy issue is the relative degree of reliance on private law, insurance, and social legislation. In the context of the legislation summarized above, the issue in this case is the proper role of BLM. In my view, section 12 does not interpose BLM in other people's private business. As steward of United States lands and lessor of United States mineral interests

11/ H.R. Rep. No. 94-981 at 10, supra note 2.
12/ Natural Resources Defense Council v. Berklund, supra at 555 n.1. The Secretary is not free to reject these applications on environmental grounds if the applicant otherwise fulfills the requirements of 30 U.S.C. § 201(b) (1976). Id. at 557.
13/ See generally National Academy of Sciences, Rehabilitation Potential of Western Coal Lands (Ballinger 1974); U.S. Department of the Interior, Final Environmental Statement, Federal Coal Management Program (Apr. 1979), ch. 5; Department of the Interior, Permanent Regulatory Program Implementing Section 501(b) of the Surface Mining Control and Reclamation Act of 1977, Final Environmental Impact Statement, OSM-EIS-1, January 1979, section III.
14/ See, for example, Shannon v. United States, 160 F. 870 (9th Cir. 1908); United States v. Johnston, 38 F. Supp. 4 (D.C. W. Va. 1941). Cf. State of Minnesota by Alexander v. Block, 660 F.2d 1240, 1248-1251 (8th Cir. 1981), cert. denied, 102 S. Ct. 1645 (1982).

it is BLM's preeminent business to manage those lands and those interests for maximum efficient production with minimum adverse effects on society in general and other interest holders in particular. This responsibility certainly encompasses section 12.

The costs and delays, not to mention the haphazard results, of private litigation are well known. It is in the interest not only of BLM and its lessees, but also of neighboring landowners, to resolve disputes concerning damage allegedly caused by lessees' operations with less expense and less delay and more certainty: In the interests of BLM and its lessees because more efficient production will be enhanced; in the interests of neighboring interest holders because they can obtain prompt and informed decisions from BLM on their complaints of damage and administrative review of those decisions they feel ignore the facts or pervert the law. If they wish to place their complaints before the courts they would, of course, remain free to seek judicial review.

The kinds of complaints suggested by my colleagues, majority opinion, supra at 101 , are not improbable; likely there would be bizarre ones, perhaps even frivolous ones. Even though some of them may be unanticipated, I doubt that BLM would be unable to referee them. I recognize that section 12 places BLM in the position of approving what a lessee must do to repair damage. I am no more concerned that it will impose unfair burdens on lessees than I am that it will inflict unwanted remedies on complainants. Administrative review would be available in the event of either.

IV. Conclusion

It is possible BLM has additional legal authorities or other policy reasons in support of section 12. Since it did not file an answer I do not know. On the basis of those recited above, however, I would uphold section 12 in its entirety. I therefore concur with the decision except for the portion that holds section 12(b)(1) "unenforceable and void insofar as it pertains to damage 'on non-Federal lands in the vicinity of the leased lands.'"

Will A. Irwin
Administrative Judge

ADMINISTRATIVE JUDGE BURSKI DISSENTING IN PART:

My objection to the majority decision is limited to its analysis of section 12(b)(1) of the standard lease form. In effect, the majority declares that the Secretary has no authority to attempt to protect non-Federal lands in the vicinity of the leased lands from actions undertaken by the United States' lessee under a lease issued by the United States. The majority's analysis of the existence or nonexistence of the Secretary's authority is, itself, dependent upon the subjective view of a majority of this Board that the policy, as manifested by the language of section 12, is "unenforceable and void." The majority, however, fails to distinguish between what the Secretary has the authority to do and what the Secretary might be well-advised to do and makes the latter standard the test for determining the extent of Secretarial authority. Inasmuch as I do not subscribe to the implicit view of the majority that a subjective determination by this Board as to the felicity of a policy circumscribes what the Secretary may or may not do, I respectfully dissent.

The first question to be faced is whether the Secretary has the authority to precondition a renewal of a lease, or a lease itself, on acceptance by a lessee of not only the obligation to minimize the detrimental effects of his operations on non-Federal land but a provision which might possibly entail cancellation of the lease for failure to so comply. I think that, in the abstract, the answer is clearly in the affirmative. Contrary to the majority, I think the language of section 30 of the Mineral Leasing Act, as amended, 30 U.S.C. § 187 (Supp. II 1978), is more than sufficient in scope to embrace such a provision. Even should this statutory language be deemed insufficient to support this lease provision, the other statutory bases discussed in Judge Irwin's dissent makes it clear beyond peradventure that such authority exists. I would note, in passing, that a similar provision relating to the obligations of coal lease operators "to minimize, control or prevent * * * adverse impacts upon adjacent land uses" was codified in the Department's regulations. (Emphasis added.) See 30 CFR 211.4(d)(10) (1981). While this language was deleted in the amendments to Subpart 211, published on July 30, 1982, 47 FR 33183, there is no indication whatsoever, that this change was promulgated because the Department felt it lacked authority to expressly police such impacts. See also Proposed Amendments, 46 FR 61424 (Dec. 16, 1981).

I do not mean to imply that the statutory language directing the Secretary to include, in every lease, provisions "to safeguard the public welfare" gives the Secretary a roving commission to include any provision in a coal lease, regardless how attenuated a relationship it might have to the purposes of the lease. Rather, I believe that any such provision must have a nexus to the subject of the lease itself, in this case the development of coal deposits. Such a nexus is clearly demonstrated by section 12(b)(1), since it is operations under the lease which serve as the precondition for Departmental involvement.

The majority, while affirming the Secretary's authority to enforce such provisions on "Federal" lands, states that enforcement of a similar provision

on adjacent "non-Federal" lands would constitute a gratuitous involvement by the Department in "the obligations, rights, and remedies relating to tortious acts between private parties." This attempted dichotomy between "Federal" and "non-Federal" lands does not work.

"Federal" lands, for the purposes of coal leasing, includes "lands owned by the United States, * * * including surface estate, mineral estate and coal estate." 47 FR 33133 (July 30, 1982), amending 43 CFR 3400.0-5(t). Why the mere fact that the Government may have a reserved mineral estate permits the Government to undertake to protect an adjacent privately owned surface estate, which the Government may not do in the absence of such a reservation, is unexplained. The only possible nexus for Government involvement would be its reserved mineral interest. The majority does not address how the mere existence of this interest is sufficient to grant the Department authority to regulate private tortious conduct or how this interest serves to make the provision more enforceable. All of the procedural objections raised by the majority necessarily apply to "Federal" land as well. If this provision is truly unenforceable as it relates to "non-Federal" lands I fail to see how it becomes more enforceable because the Government has a reserved mineral estate in land privately owned.

Finally, I agree with the majority's interpretation of the limited coverage presently provided by section 12(b)(1). The arguments which it makes as to the negative inferences which might be drawn from the limiting language relating to "impracticality" are well-taken. But I find it strange that, after lamenting the limited nature of the protection afforded, we then proceed to correct this problem by removing all protection whatsoever. I doubt there is a single landowner in the vicinity of a Federal coal lease who would appreciate that he is better protected by this provision's removal than he was by its existence.

The language of this provision is not as I would have drafted it. But the matter of personal preference is not properly a consideration in our adjudicative role. We should limit ourselves to determining whether or not authority exists for this provision, not whether we think it is either needed or wise. The authority exists; the language, though limited, is capable of rational interpretation; the problems of enforcement are properly considered when this provision is applied. These problems must be faced, in any event, when we are presented with a violation of section 12(b)(1) relating to "Federal" lands.

This lease provision does not, and could not, preempt any remedies available under state law. It is clearly cumulative to such remedies as already exist. It merely attempts to involve the Government, as lessor, in affirmatively policing the operations of its lessee as they may affect other members of the public. Just as a private landlord could and often does condition a lease for a residence with an express provision relating to the playing of loud music so as to protect other residents in the peaceful and quiet enjoyment of their premises, so, too, the Government should be able to undertake minimal efforts to protect its neighbors. I fail to see what

interest of the Government or this Department is advanced by denying it the authority to be a good neighbor.

I dissent.

James L. Burski
James L. Burski
Administrative Judge

I concur:

Bruce R. Harris
Bruce R. Harris
Administrative Judge

A Broad Interpretation of the Secretary's Section 30 Authority to Mitigate

The following article (Exhibit 13) authored by Professor George W. Pring, "Power to Spare: Conditioning Federal Resource Leases to Protect Social, Economic, and Environmental Values," was previously published in Natural Resources Lawyer, Volume XIV, Number 2 (1981), pages 305-338. It is reprinted with the express permission of the copyright holder, the American Bar Association Section on Natural Resources Law. The Pring article was written from an advocacy perspective and, it should be noted, was sponsored by the State of Colorado, whose interests were clearly served by his broad reading of section 30, FLPMA and other statutes. The State's purpose was to develop legal arguments for the BLM's imposition of measures which would protect or promote State and local interests in Federal mineral leasing processes.

It should also be noted that this expansive interpretation of these statutes is aided by a narrow interpretation of the Ventura County decision.

EXHIBIT 13

GEORGE W. PRING*

"Power to Spare": Conditioning Federal Resource Leases to Protect Social, Economic, and Environmental Values

It is the stars,
The stars above us, govern our conditions.
Shakespeare, *King Lear*

Resumption of the Federal Coal Leasing Program[1]—coupled with anticipated growth in oil shale,[2] oil and gas,[3] and other federal energy resource programs[4]—promises dramatically increased energy development in the

*Associate Professor of Law, University of Denver College of Law, Denver, Colorado.

This article is based on a study prepared by the Natural Resources Program of the College of Law for the State of Colorado, Department of Natural Resources. The author wishes to acknowledge the major contributions made by Professor John A. Carver, Jr., consultant; Stephen J. Sullivan, research associate; and the staff of the Executive Director, Colorado Department of Natural Resources. The author, of course, bears sole responsibility for the article's content and conclusions.

[1]The decision of the Secretary of the Interior was announced June 1, 1979. U.S. DEP'T OF THE INTERIOR, SECRETARIAL ISSUE DOCUMENT: FEDERAL COAL MANAGEMENT PROGRAM (1979).

For an excellent history of the off-again-on-again federal coal leasing efforts, as well as an analysis of the current program, see Watson, *The Federal Coal Follies—A New Program Ends (Begins) a Decade of Anxiety?*, 58 DEN. L. J. 65 (1980) [hereinafter cited as Watson]; U.S. DEP'T OF THE INTERIOR/BUR. LAND MGM'T, FINAL ENVIRONMENTAL STATEMENT: FEDERAL COAL MANAGEMENT PROGRAM 1-8 to 1-15 (Apr. 1979) [hereinafter cited as Programmatic FEIS]. Further analysis is contained in three cases critical in shaping the program: Natural Resources Defense Council v. Hughes, 437 F. Supp. 981 (D.D.C. 1977), amended 454 F. Supp. 144 (D.D.C. 1978) (federal coal leasing program); Natural Resources Defense Council v. Berklund, 458 F. Supp. 925 (D.D.C. 1978), *aff'd*, 609 F.2d 553 (D.C. Cir. 1979) (preference right coal leasing program); Kleppe v. Sierra Club, 427 U.S. 390 (1976) (Northern Plains regional coal EIS). The author participated as counsel for the Environmental Defense Fund in these three cases.

[2]On the existing federal oil shale prototype leasing program and its proposed expansion: Environmental Defense Fund v. Andrus, 619 F.2d 1368 (10th Cir. 1980); COLORADO ENERGY RESEARCH INST., COLORADO OIL SHALE DEVELOPMENT SCENARIOS: 1981-2000 (March 1981); U.S. EPA, PROGRAM STATUS REPORT: OIL SHALE 1980 UPDATE (July 1980); Holland, *Mixing Oil and Water: The Effect of Prevailing Water Law Doctrines on Oil Shale Development*, 52 DEN. L. J. 657 (1975); Schanz & Perry, *Oil Shale—A New Set of Uncertainties*, 18 NAT. RESOURCES J. 775 (1978); Spence & Ruda, *Synthetic Fuels—Policy and Regulation*, 51 COLO. L. REV. 465 (1980).

[3]Sec'y of the Interior, Order No. 3051 (Apr. 7, 1980) (resumption of noncompetitive oil and gas leasing program); *Federal Court Rejects Wilderness Protection Policies in Energy-Rich Rocky Mountain Overthrust Belt*, 11 ENVT'L L. REP. (ELI) 10021 (1981).

[4]U.S. EPA (REGION VIII), SYNTHETIC FUELS PROJECTS STATUS REPORT (Nov. 1980); Goperud & O'Neil, *Coal Gasification: The Critical Issues*, 58 DEN. L. J. 35 (1980); U.S. EPA (REGION VIII), ENERGY PROJECT REVIEW AND PERMITTING STATUS REPORT (June 1980); *id.* (Sept. 1980).

1980s for the Rocky Mountain West.[3] With this expanding energy development will come extensive impacts on social, economic, and environmental resources in the affected states,[4] heightening the need for advance measures to reduce or eliminate those problems.

The federal government has more than ample authority to mitigate these critical impacts, in particular, through more effective conditions and stipulations in federal resource leases themselves. In addition to environmental mitigation requirements, it has authority to protect the "public welfare" through conditions governing transportation, social and economic impacts, and compliance with state and local laws. Yet, despite having "power to spare," in both senses of the phrase, federal authorities are not proceeding to develop such lease safeguards to any great degree and have resisted state and local governments' requests for such protection.[7] This article focuses on coal leasing examples, but its conclusions are germane to all forms of federal resource leasing.

Measures to eliminate or reduce impacts can be developed by several means and at various stages in the leasing process. At the most general level,

---

[3]Specifically on increased coal projections: Programmatic FEIS 5-13 to 5-43, H-1 *et seq.*; 1 U.S. DOI/BLM, FINAL GREEN RIVER-HAMS FORK REGIONAL COAL ENVIRONMENTAL IMPACT STATEMENT (Aug. 1980) [hereinafter cited as Green River Regional FEIS]; SEC'Y OF INTERIOR, FEDERAL COAL MANAGEMENT REPORT: FISCAL YEAR 1979 (Mar. 1980); U.S. DOI, *Secretarial Issue Document: Coal Leasing in the Green River-Hams Fork Region* (Oct. 1980) [hereinafter cited as Green River SID].

The Green River Regional FEIS covers a 37,000 square mile area of northwest Colorado and southwest Wyoming; it is the first of 10 geographic regions identified for expanded mining under the new federal coal management program. As the first of the "new generation" of regional coal EISs, this FEIS is expected to be the model for future regions.

The previous round of regional EISs, *e.g.*, DOI, FINAL ENVIRONMENTAL STATEMENT: NORTHWEST COLORADO COAL (Dec. 1978), etc., have essentially been scrapped, except for limited interim approvals and providing data for the "new competitive leasing programs." SEC'Y OF INTERIOR, FEDERAL COAL MANAGEMENT REPORT: FISCAL YEAR 1979 at 20 (March 1980).

[4]1 GREEN RIVER REGIONAL FEIS 187 *et seq.*; Programmatic FEIS 5-1 *et seq.*, esp. 5-23; DEP'T OF ENERGY, REGIONAL PROFILE—ENERGY IMPACT COMMUNITIES—REGION VIII (DOE/TIC-10001, Mar. 1979); COLORADO ENERGY RESOURCE DEVELOPMENT PLAN PROJECT (COLORADO DEP'T OF NAT. RESOURCES), PROJECTIONS OF NORTHWEST COLORADO ENERGY DEVELOPMENT AND ASSOCIATED IMPACTS THROUGH THE MID-1990S: A PRELIMINARY REGIONAL PERSPECTIVE (Oct. 1980); Division of Impact Assistance (Colorado Dep't of Local Affairs), *Cumulative Impact Task Force Report* (Feb. 1981); U.S. GEOLOGICAL SURVEY, THE YAMPA BASIN, COLORADO AND WYOMING—A PREVIEW TO EXPANDED COAL RESOURCE DEVELOPMENT AND ITS IMPACTS ON REGIONAL WATER RESOURCES (USGS/WRI 78-126, Sept. 1979).

[7]Colorado's experience is documented by two state officials in a very thorough report, D. JOHN & D. KUNTZ, STATE PARTICIPATION IN FEDERAL COAL LEASING—LESSONS FROM THE GREEN RIVER-HAMS FORK (Colorado Dep't of Nat. RESOURCES, Mar. 1981) [hereinafter cited as Colorado Lessons]; Green River SID 7-8, 45-46, 69-71.

One of Colorado's energy-impacted counties is having a parallel experience in seeking socioeconomic conditions in a BLM right-of-way for a coal mine/electrical complex; see text at notes 172-175, *Infra*, California has experienced the same resistance in urging that federal outer continental shelf oil and gas leases contain stipulations protective of the state's coastal zone management program. Deller, *Federalism and Offshore Oil and Gas Leasing: Must Federal Tract Selections and Lease Stipulations Be Consistent with State Coastal Zone Management Programs?*, 14 U. CAL. DAVIS L. REV. 105 (1980).

regulations can be adopted governing operation and mitigation requirements. The existing coal leasing regulations show the difficulties of relying heavily on this general level to solve future impacts; the regulations (1) are of general (not site-specific) application, (2) prescribe standards (not necessarily actual mitigation measures), (3) deal chiefly with physicial impacts, and (4) may not adequately address cumulative impacts of mining throughout a region.[8]

More focused and effective impact planning can occur at four other stages of the current coal leasing process:

1. Eliminating or conditioning land availability in the *land use/activity planning processes*;[9]
2. Mitigation findings developed in applicable *environmental impact statements* (EISs);[10]
3. Special stipulations, conditions, requirements, performance standards, etc., included *in the lease itself*;[11] and
4. Conditions upon *approval of the mining plan*.[12]

For critical regions of Colorado and Utah the first two opportunities have passed, with few firm mitigation requirements developed.[13] The third opportunity, lease conditions, is slipping away as lease sales proceed.[14] Postponing mitigation requirements until the mining plan approval stage or relying on retroactive regulation is antithetical to sound planning and may raise legitimate claims of interference with vested rights.

---

[8]*E.g.*, BLM coal management regulations, 43 C.F.R. Parts 3400 *et seq.* (1979), as amended; USGS coal mining operating regulations, 30 C.F.R. Part 211 (1978), as amended; OSM permanent program regulations, 30 C.F.R. Parts 700 *et seq.* (1977), as amended. In theory, regulations might be adopted even after leasing and made "retroactively" applicable. Hannifin v. Morton, 444 F.2d 200 (10th Cir. 1971) (application for sulfur prospecting permit). The government is on much firmer ground, of course, when it demands a contractual condition in the lease whereby the lessee agrees in advance to be bound by all applicable future regulations.

[9]These are described (as best they can be) in the Programmatic FEIS 3-17 *et seq.*; Watson, 58 DEN. L.J. at 104 *et seq.*; Colorado Lessons 11 *et seq.* For a criticism of this confused planning system by the General Accounting Office, see U.S. Comptroller General, Issues Facing the Future of Federal Coal Leasing (EMD-79-47, June 25, 1979).

[10]*See* Programmatic and Regional EISs.

[11]This analysis uses all of these terms as they apply in normal contract-lease analysis. It should be noted, however, that the federal agencies have developed special usages. According to the BLM, "terms" and "conditions" in a lease refer only to the provisions in their standard, printed form leases; "stipulations" cover any additional requirements added to a particular lease. BLM, USGS, and OSM Memorandum of Understanding: Management of Federal Coal at 4 (Oct. 1979).

[12]30 C.F.R. §§ 211.10(d) (1978).

[13]Compare the vague discussion of "Committed Mitigation" and "Uncommitted Mitigation" in Green River Regional FEIS at 187 *et seq.* with U.S. DOI/BLM, FINAL UINTA-SOUTHWESTERN UTAH REGIONAL COAL ENVIRONMENTAL IMPACT STATEMENT 65-67 (Feb. 1981). "Committed" simply means "required by law or promised by BLM"; "uncommitted" presumes neither. COLORADO LESSONS 27.

[14]The first lease sales were held in January 1981. Colorado Lessons 38-39. Lease sales for seven other regions are scheduled for 1981-83. SEC'Y OF THE INT., FEDERAL COAL MANAGEMENT REPORT: FISCAL YEAR 1979 at 20 (March 1980).

In 1979, the Secretary of the Interior correctly determined that such mitigation requirements should be decided "prior to the lease sale," not afterward.[11] Yet, federal coal officials continue to express uncertainty over the extent of their powers to require private lessees to engage in needed mitigation.[14] To date the Reagan administration has not rectified the situation, raising the question whether they plan to emulate the Carter Administration practices or forge new directions of their own.

The existing federal standard-form coal lease contains one brief section of conditions to minimize environmental damage.[15] Its generality renders it insufficient for all but the most rudimentary protection. The generality is also no boon to the lessee:

> Mineral explorers and developers under the leasing laws face substantial uncertainty as a result of the vague and general wording of almost all the current lease provisions and regulations concerning nonmineral resource protection. Like the similarly worded Forest Service surface use regulations under the Mining Law, they are subject to ad hoc and unpredictable interpretation and implementation.
>
> Specific controls on particular mining operations are negotiated through the process of submission and approval of exploration or mining plans. Although technically the controls imposed through this process cannot go beyond the restrictions expressed or implied in the particular lease or governing regulations, the general wording of the lease provisions and regualtions (together with the lessee's desire to avoid the delays involved in administrative or judicial appeals) give the responsible Federal officer considerable leverage.[16]

The lease represents the most flexible and reliable stage for protection against the enormous social, economic, and environmental impacts of federal resource extraction. Failure of the Reagan administration to act creatively with this authority will needlessly increase the impacts of and resistance to mineral leasing programs, and it will make the programs vulnerable to legal attack.

This article first analyzes the federal government's constitutional, statutory, judicial, and departmental authority to condition leases. Next it examines conditioning authority in five specific areas: off-site, wildlife, transportation, socioeconomic, and application of state-local laws. The third section of the article traces the federal government's actual track record in 1980-81. Finally, in the last section the paper addresses the argument that the federal government has not only the power but the legal *duty* to regulate these impacts through specific lease conditions.

---

[11] Programmatic FEIS at 6-4.

[14] Transcript, Meeting of the Federal-State Green River-Hams Fork Coal Team at 34-53 (Craig, Colorado, Jan. 29, 1980) (copy in author's files).

[15] BLM Coal Lease (Form 3520-1 July 1977), § 12. *See* 5 AMERICAN LAW OF MINING 1018-1185 (1961) (cross section of federal forms for various mineral leasing operations; U.S. D.A., ENVIRONMENTAL ASSESSMENT: OIL AND GAS LEASING, FLATHEAD NAT'L FOREST 30-31, 67-74, 100-105 (1980) (use of various lease stipulation forms; failure to provide same for socioeconomic impacts).

[16] U.S. OFFICE OF TECHNOLOGY ASSESSMENT, MANAGEMENT OF FUEL AND NON-FUEL MINERALS IN FEDERAL LANDS 210 (1979).

I. THE BASES OF FEDERAL LEASE-CONDITIONING POWER

The federal government's authority to condition its resource leases is firmly based on a broad spectrum of constitutional and statutory provisions, as well as judicial decisions and departmental statements and practice. Each basis bears examining in turn.

A. *Constitutional Authority*

The foundation of federal government authority over the federal public lands is one of the most sweeping empowerments in the *United States Constitution*. The Property Clause, article IV, § 3, cl. 2, states, in pertinent part:

> The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States. . . .[19]

Any thoughts of a narrow reading of Congress's power under the Property Clause were swept away by the recent United States Supreme Court decision in *Kleppe v. New Mexico*.[20] There the Court upheld Congress's power to legislate to protect wild horses and burros on the federal lands. Pointing out that "the farthest reaches of the power granted by the Property Clause have not yet been definitely resolved," the Court reaffirmed its often-repeated ruling that "[t]he power over the public lands thus entrusted to Congress is without limitations."[21] The only qualifications on federal land power are that the rules made must be "needful" and "respecting" the public land.[22]

The federal power combines that of a proprietor with that of a sovereign (legislative police power) and is, in sum, "complete power."[23] States continue to exercise general jurisdiction over the federal lands within their borders, but federal laws will "override" state laws that are "conflicting" with, "incompatible with," or "restrained by" federal constitutional property rights.[24] Fundamental to the lease context, the Property Clause gives Congress power "to control [the public lands'] occupancy and use, to protect them from trespass and injury and to *prescribe the conditions upon which others may obtain rights in them*. . . ."[25]

The power is by no means confined solely to the public lands

---

[19] Additional constitutional provisions affecting federal land management include art. I, § 8 (Jurisdiction Clause); art. VI, cl.2 (Supremacy Clause); art. I, § 8, cl.3 (Commerce Clause); art. II, § 2, cl.2 (Treaty Clause).

[20] 426 U.S. 529 (1976). An excellent, scholarly criticism is made in Engdahl, *State and Federal Power over Federal Property*, 18 ARIZ. L. REV. 283 (1976); Note, *The Property Power, Federalism, and the Equal Footing Doctrine*, 80 COLUM. L. REV. 817 (1980).

[21] 426 U.S. at 539.

[22] *Id.*

[23] *Id.* at 540.

[24] *Id.*

[25] Utah Power & Light Co. v. United States, 243 U.S. 389, 405 (1917) (emphasis added) (occupancy without permission).

themselves. In the early case of *Camfield v. United States*[26] the Supreme Court upheld federal regulation of fences built on private land adjoining public land. The modern Court's reading of *Camfield* is that "the power granted by the Property Clause is broad enough to reach beyond territorial limits,"[27] at least "when the regulation is for the protection of the federal property."[28]

B. *Statutory Authority*

Congress, in turn, has delegated to the Secretary of the Interior broad discretion to regulate and impose conditions on the use of federal land under Interior jurisdiction. Some of the most recent examples are contained in the Federal Land Policy and Management Act of 1976 (FLPMA).[29] That Act contains potentially one of the most sweeping empowerments in federal law: "In managing the public lands the Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands."[30]

In the mineral resource area, the Secretary operates under a "continuing policy" of Congress:

> to foster and encourage private enterprise in . . . the study and development of methods . . . to lessen any adverse impact of mineral extraction and processing upon the physical environment. . . .
>
> It shall be the responsibility of the Secretary of the Interior to carry out this policy when exercising his authority under such programs as may be authorized by law. . . .[31]

In addition to such generic powers and policies, a welter of congressional acts specifically authorize broad secretarial power to impose terms and conditions on mineral leases.

In 1920, Congress made a radical policy change in the disposition of federal coal. Coal (as well as oil and gas, oil shale, and fertilizer and

---

[26]167 U.S. 518 (1897).

[27]426 U.S. at 538.

[28]*Id.* While the Court refused to reach the extraterritorial question, as unnecessary on the facts (426 U.S. at 546–47), the law involved extends beyond the federal lands, protecting horses and burros which "stray from public lands onto privately owned land." *Id.* at 532.

Both older and more recent cases offer conceptual support for extraterritorial federal powers. *E.g.*, United States v. Alford, 274 U.S. 264 (1927) (fire "in or near" public forest); United States v. Lindsey, 595 F.2d 5 (9th Cir. 1979) (campfire on state inholding in national recreation area). Coggins & Hensley, *Constitutional Limits on Federal Power to Protect and Manage Wildlife: Is the Endangered Species Act Endangered?*, 61 IOWA L. REV. 1099 (1976); Sax, *Helpless Giants: The National Parks and the Regulation of Private Lands*, 75 MICH. L. REV. 239 (1976).

[29]43 U.S.C. §§ 1701 *et seq.* (1976).

[30]*Id.* at § 1732(b). Similarly, 43 U.S.C. § 1782(c) and the broad rulemaking authority of 43 U.S.C. § 174Q. The powers are all the more interesting in view of Congress's expressed goal to *limit*, through FLPMA, secretarial discretion in areas such as land withdrawals. Carver, *BLM Organic Act: Federal Land Policy and Management Act of 1976: Fruition or Frustration*, 54 DEN. L.J. 387 (1977).

[31]Mining and Mineral Policy Act of 1970, 30 U.S.C. § 21a (1976).

chemical minerals) was removed from the location-patent system of the General Mining Act of 1872 and placed under the current leasing system retaining both land ownership and greater operational control in the federal government.[32]

The Mineral Leasing Act of 1920[33] provides broad statements of the Secretary's power to impose conditions on leases.

> Each lease shall contain provisions for the purpose of insuring the exercise of reasonable diligence, skill, and care in the operation of said property; . . . for the prevention of undue waste . . . and such other provisions as [the Secretary] may deem necessary . . . for the safeguarding of the public welfare.[34]

It also provides that "[t]he Secretary of the Interior is authorized to prescribe necessary and proper rules and regualtions and to do any and all things necessary to carry out and accomplish the purposes of this chapter. . . ."[35]

Specifically for coal leases, the Act states that "[t]he lease shall include such other terms and conditions as the Secretary shall determine."[36] And for exploration licensing, the Act states:

> Each exploration license shall contain such reasonable conditions as the Secretary may require, including conditions to insure the protection of the enviroment and shall be subject to all applicable Federal, State and local laws and regulations.[37]

Similar lease-conditioning language is used for oil shale,[38] outer continental shelf oil and gas,[39] and the acquired lands minerals.[40]

Other laws affecting federal coal management serve to strengthen the Secretary's broad powers with respect to lease conditions. A number of the powers of the Secretary were transferred to the Department of Energy (DOE) by the DOE Organization Act of 1977.[41] That act specifies that the Secretary of the Interior "shall retain . . . and shall be solely responsible for the issuance and supervision of the federal leases . . . including but not limited to lease terms and conditions. . . ."[42] The DOE Act provision that the Secretary of Energy may disapprove any Interior regulation or lease terms relates solely to the specific areas transferred to DOE (competition,

---

[32] 1 AMERICAN LAW OF MINING 53, *supra* note 17; U.S. OFFICE OF TECHNOLOGY REPORT, *supra* note 18, at 79-98; Programmatic EIS 1-9.

[33] 30 U.S.C. § 181 *et seq.* (1976).

[34] *Id.* at § 187.

[35] *Id.* at § 189.

[36] *Id.* at § 207(a).

[37] *Id.* at § 201(b)(1).

[38] *Id.* at § 241(a).

[39] 43 U.S.C. § 1337(b)(4) (1976).

[40] 30 U.S.C. § 352 (1976).

[41] 42 U.S.C. §§ 7101 *et seq.* (Supp. 1 1977). For a negative view of the problems this creates, see U.S. General Accounting Office, Federal Leasing Policy—Is the Split Responsibility Working? (EMD-79-60, June 4, 1979).

[42] *Id.* at § 7153(a).

bidding, diligence, and production), not those retained by Interior.[43]

Provisions of FLMA, in addition to those quoted above, expand the Secretary's lease-conditioning authority:

> In managing the public lands, the Secretary shall, subject to this Act and other applicable law and under such terms and conditions as are consistent with such law, regulate, through easements, permits, leases, licenses, published rules, or other instruments as the Secretary deems appropriate, the use, occupancy, and development of the public lands.
>
> The Secretary shall insert in any instrument [including a lease] providing for the use, occupancy, or development of the public lands a provision authorizing revocation or suspension after notice and hearing, of such instrument upon a final administrative finding of a violation of any term or condition of the instrument. . . . *Provided,* that such violation occurred on public lands covered by such instrument.[44]

In adopting the Surface Mining Control and Reclamation Act of 1977 (SMCRA),[45] Congress also authorized broad protective powers. One of the stated purpose of the SMCRA is to, "whenever necessary, exercise the full reach of federal constitutional powers to insure the protection of the public interests through effective control of surface coal mining operations."[46] Lest the specificity of the SMCRA be used as an argument to limit the Secretary's lease conditioning power, SMCRA expressly states that the reverse is true:

> Nothing in this chapter shall affect in any way the authority of the Secretary [of Interior] or heads of other Federal agencies under other provisions of law to include in any lease, license, permit, contract, or other instrument such condition as may be appropriate to regulate surface coal mining and reclamation operations on land under their jurisdiction.[47]

In summary, the controlling federal statutes—repeatedly and without exception—vest in the Secretary of the Interior broad powers to condition federal resource leases in order to protect the public interest and welfare.

C. *Judicial*

The courts have routinely given a broad reading to the Interior Secretary's authority, supporting even the most exacting conditions on federal mineral leases. In the frequently cited case of *Boesche v. Udall*[48] a unanimous Supreme Court ruled that the Mineral Leasing Act of 1920 was intended to expand, not contract the Secretary's control over United States mineral lands. According to the Court, "Congress under the Mineral Leasing

---

[43] *Id.* at § 7153(c).
[44] *Id.* at § 1732(c).
[45] 30 U.S.C. § 1201 *et seq.* (Supp. II 1978).
[46] *Id.* at § 1202(m).
[47] *Id.* at § 1291(b).
[48] 373 U.S. 472 (1963). While the case dealt with the narrow question of the Secretary's authority to cancel an oil and gas lease based on a pre-existing violation of a Mineral Leasing Act regulation, it is typically relied on for its general analysis of the Secretary's leasing powers under the Act.

Act . . . has also subjected the lease to exacting restrictions and continuing supervision by the Secretary."[29] The power extends to "minute details" covering "all facets of the working of the land leased."[30]

Nor is the Secretary limited even to the broad powers of the Mineral Leasing Act; beyond that he can rely on his "general managerial powers over the public lands" to justify lease actions not expressly authorized by the Act.[31] Thus, even *lack of statutory authority* may not constitute a barrier to imposing a particular lease condition. A Tenth Circuit case has upheld a rental fee imposed on sulphur prospecting permits even though there was no "express statutory authorization" for such a condition. The court ruled that where there is no "legislative prohibition express or implied, . . . it is generally recognized that the Secretary has broad authority quite apart from that granted to him in the . . . Act."[32] In that case even applying the new condition retroactively could not "be regarded as an unreasonable exercise of this authority."[33]

Coal leasing cases confirm broad secretarial powers apply there as well.[34] Even in dealing with the arguably vested rights of preference right leases, the Secretary's power to condition lease remains extensive.[35]

Offshore oil leases have contained some of the most stringent conditions and have generated some of the most sweeping court rulings on secretarial power:

> Oil and gas deposits beneath the Continental Shelf are precious resources belonging to the entire nation. Congress, although encouraging the extraction of these resources by private companies, provided safeguards to insure their exploitation should insure to the benefit of all. These safeguards are not limited to those provided by convenants in the lease; Congress also authorized the Secretary to maintain extensive continuing regulation of the oil company's day to day drilling operations.
>
> . . . Congress intended to exercise both proprietary powers of a landowner and the police powers of a legislature in regulating leases of publicly owned resources.[36]

---

[29] *Id.* at 477–78.

[30] McKenna v. Wallis, 344 F.2d 432, 441 (5th Cir. 1965), *vacated on other grounds sub nom.* Wallis v. Pan American Petroleum Corp., 384 U.S. 63 (1966). The power is of course not unlimited. *See* Chapman v. El Paso Natural Gas Co., 204 F.2d 46 (D.C. Cir. 1953), overturning right-of-way conditions imposing detailed commercial and functional operating requirements on pipeline company.

[31] Boesche v. Udall, 373 U.S. at 476; Alaska v. Andrus, 580 F.2d 465, 483 (D.C. Cir. 1978).

[32] Hannifin v. Morton, 444 F.2d 200, 202 (10th Cir. 1971).

[33] *Id.*

[34] Natural Resources Defense Council v. Hughes, 454 F. Supp. 148, 154 (D.D.C. 1978).

[35] Natural Resources Defense Council v. Berklund, 458 F. Supp. 925, 937 (D.D.C. 1978), *aff'd*, 609 F.2d 553, 559 (D.C. Cir. 1979); Sheridan-Wyoming Coal Co., Inc. v. Krug, 172 F.2d 282, 288 (D.C. Cir. 1949) (wide discretion). *See* Johns, *Federal Preference Right Coal Leases: How Much "Right" Really Exists?*, 12 NAT. RESOURCES LAW. 389 (1979).

[36] Union Oil Co. of California v. Morton, 512 F.2d 743, 747 (9th Cir. 1975). While OCS leasing is controlled by a different leasing statute (The Outer Continental Shelf Lands Act

We do not lack for extreme judicial views[57] of this power. The District Court Circuit has ruled—over the Secretary's objection—that the Secretary has the authority to include a "termination clause" in leases, effective "if environmental hazards, unknown or unforeseen at the time of leasing, subsequently arose or were discovered."[58] In the wake of the Santa Barbara Channel oil blowout, the Court of Claims has gone so far as to suggest that the Secretary has "power and authority to obliterate and/or interfere with vested lease rights," without paying compensation, provided the action is not an "unbridled, unjustified, and unreasonable interference."[59]

Courts have been protective of this broad power because lease stipulations are an "additional important mechanism for minimizing the environmental impacts" of mineral extraction.[60] Indeed, lease conditions are not only "important," they may also represent a last chance, since courts express reluctance to read conditions into a lease if the Secretary has failed to include them.[61]

D. *Department of Interior Statements and Practice*

The Department of the Interior's (DOI's) Final EIS for the Federal Coal Management Program (Programmatic EIS) recognizes at the outset "the potential for serious social, economic, and ecological impacts of expanded coal production and use."[62] In discussing mitigation of major adverse im-

---

Amendments of 1978, 43 U.S.C. § 1331 *et seq.*, as amended, its lease condition section (43 U.S.C. § 1337(b)(4))uses substantially the same language as the Mineral Leasing Act (30 U.S.C. § 187) and the courts frequently compare the two acts and their cases in analyzing secretarial authority. *E.g., Union Oil*, 512 F.2d at 747. Curiously, some state and federal officials may not view lease stipulations as an appropriate mechanism for mitigating OCS socio-economic impacts. Colorado Lesson at appx. G-3; *but see*, Deller, *supra* note 7.

[57]*E.g.*, Alaska v. Andrus, 580 F.2d 465, 482 (D.C. Cir. 1978) (termination clauses for environmental damage); Copper Valley Machine Works, Inc. v. Andrus, 474 F. Supp. 189 (D.D.C. 1979) (seasonal operation prohibition); William S. Burness, IBLA 70-72 (1970) (operation prohibited within particular areas of the lease); Quantex Corp., 4 IBLA 31, 78 I.D. 317 (1971) (occupancy prohibited in areas of lease set aside for recreation, aesthetic, other values); Montana Power Co., 72 I.D. 518 (1965) (reclamation requirement not authorized by statute, covering non-federal surface).

While this discussion highlights the wide scope of deferential court opinions on the Secretary's power, the converse must also be kept in mind. The courts have ample power under the cited statutes to find that the Secretary's actions are "arbitrary and capricious," or are plainly not within the statutory requirements that actions be "needful," "reasonable," or the like. Administrative Procedure Act, 5 U.S.C. §§ 701, 704, 706 (1976).

[58]Alaska v. Andrus, 580 F.2d at 480-84; *see* Conservation Law Foundation of New England, Inc. v. Andrus, 623 F.2d 712, 715 (1st Cir. 1979) (Secretary's future compliance with other laws, *e.g.*, Endangered Species Act, is an "implied . . . condition" of leases).

[59]Sun Oil Co. v. United States, 572 F.2d 786, 802 (Ct.Cl. 1978).

[60]North Slope Borough v. Andrus, 486 F. Supp. 332, 349 (D.D.C. 1979), *aff'd in part and rev'd in part on other grounds*, 642 F.2d 589 (D.C. Cir. 1980).

[61]United States v. General Petroleum Corp. of California, 73 F. Supp. 225, 234 (S.D. Cal. 1947).

[62]Programmatic FEIS at 1-3.

pacts the FIS states that the leasing program "requires" that "decisions . . . assure that the environment be protected and that the interests of individuals and communities be considered."[61] The DOI expressly recognizes that its statutory duty to mitigate the impacts of the program are to be carried out *inter alia*, through "stipulations attached to leases and mining plans."[62] Further, "[t]he Department also recognizes its responsibility to use its discretion in the application of additional measures which would further minimize environmental and community disturbance."[63]

The Secretary has determined, according to the EIS, that "stipulations needed to insure . . . protection" must be made "prior to the lease sale, rather than waiting to make this determination at the mining plan stage."[64] The determination is in part enlightened self-interest: mitigation not only protects others from the program, but also protects the program by "a reduction in conflict and an increase in acceptance of . . . management decisions . . . [resulting in] less delay and uncertainty."[65]

Despite this, however, the programmatic EIS does not provide firm guidance for such lease stipulations, analysis of their benefits, examples of alternatives, or any specific requirements for their development.

The final Green River Regional EIS (Regional EIS)[66] is the first regional EIS published under the newly resumed federal coal leasing program and is expected to serve as a model for future such EISs under the program. Yet, it does not cure the omissions in the programmatic EIS. In a lengthy chapter on "Environmental Consequences,"[67] the regional EIS hedges on "commitment." Very few of the environmental problems are covered by "committed mitigation;" the vast majority are "uncommitted." Also, the EIS relies heavily on nonspecific suggestions with little or no assessment of their importance, consequences, language, alternatives, applicability, or the intention of the agency to put them into actual leases.

Certainly if the DOI does not now move to actually implement acceptable conditions, their program could be vulnerable to a NEPA attack. The recent case of *North Slope Borough v. Andrus*[70] is an instructive "close shave" for DOI, on concededly far better facts. There, the district court enjoined DOI's OCS oil and gas leasing in the Beaufort Sea specifically for the EIS's failure, *inter alia*, to analyze lease stipulations. "Content" and "general rationale" were insufficient for the district court without discus-

---

[61] *Id.* at 6-1.
[62] *Id.* at 6-2.
[63] *Id.*
[64] *Id.* at 6-4.
[65] *Id.* at 6-2.
[66] *Supra*, note 5.
[67] Green River Regional FEIS at 187-313.
[70] 486 F. Supp. 332 (D.D.C. 1979), *aff'd in part and rev'd in part*, 642 F.2d 589 (D.C. Cir. 1980).

sion of "alternative lease stipulations" and their "probable effectiveness."[11]

The court of appeals panel reversed on this point. In doing so, however, it based its ruling on favorable factors lacking in the coal EISs. The opinion supports the importance of lease stipulations and their careful assessment under NEPA. It emphasizes (1) the existence of (and EIS assesment of) "numerous specific lease stipulations" as well as (functionally similar) lessee instructions;" (2) the Secretary's close, "continuing review of all activity" and ability "to impose subsequent restrictions;"[12] and (3) the fact that "the Secretary did in fact have alternative lease stipulations before him," as analyzed in a later secretarial issue document (SID).[13]

Another federal district court recently blocked renewed federal oil leasing off the California coast on grounds similar to those in *North Slope Borough*. In *California v. Watts*,[14] the court noted DOI's exclusion of the state from prelease arrangements including development of lease stipulations.

The Green River Regional EIS falls squarely into the district court's enumerated failures in *North Slope Borough*, without any of the three ameliorating factors on which the appellate panel relied. Its omissions are so fundamental it would seem only an aggressive program for developing "committed" lease conditions would have a chance of salvaging the EIS were it attacked as in *North Slope Borough*.

Interior Department regulations, similarly, acknowledge and support broad secretarial authority to condition leasing in the public interests while conversely failing to provide significant implementation. One of the strongest statements comes from the DOI's preface to the coal management regulations.[15] Speaking in the context of preference right leases (those over which it would be presumed the Secretary had the most narrow authority), DOI's preamble states:

> The Department of the Interior has had the authority since 1920 to put necessary terms and conditions in all mineral leases "for the protection of the interests of the United States . . . and for the safeguarding of the public welfare." (30 U.S.C. 187). The Mineral Leasing Act was enacted to give the Department of Interior greater authority over mineral development on the public lands, to protect the interests of the entire country in the wise development of the nation's energy minerals, than it previously had. As the Supreme Court said in *Boesche v. Udall*, 373 U.S. 472, 481 (1963), the Mineral Leasing Act was passed "to expand, not contract, the Secretary's control over the mineral lands of the United States."[16]

---

[11] 486 F. Supp. at 349.
[12] 642 F.2d at 594, 595-97, 601-02.
[13] *Id.* at 594-95, 596-97.
[14] *Id.* at 602-04.
[15] No. 81-2080 (C.D. Cal. May 27, 1981).
[16] 44 Fed. Reg. 42584 *et seq.* (July 19, 1979).
[17] *Id.* at 42598.

DOI then provides a very significant statement of its powers:

> For many years, the Department of Interior has aggressively exercised this authority and similar authority granted under other acts . . . to protect a variety of environmental and natural resource interests. . . . [E]ven before the Congress passed the Surface Mining Act, the Department of the Interior had asserted extensive authority to insert extensive stipulations and conditions in a lease to protect the public interest.
>
> . . . For these reasons, the Department of the Interior has the authority to impose lease terms . . . even where the overall effect of the conditions, coupled with the lease applicant's obligations to meet all other lease terms and to pay rent, royalty, meet diligence requirements and the lease applicant's inability to receive a sufficiently high price for the coal that can be mined, results in the Department's finding that the applicant does not have the reasonable likelihood of making a profit. *NRDC v. Berklund, supra*. The only limitations on the authority to impose such lease conditions are the provisions in section 522 of the Surface Mining Control and Reclamation Act itself, which exempts certain operations from the application of unsuitability judgments based on that section. . . ."[7]

General DOI regulations place the "responsibility" on the Bureau of Land Management (BLM) to "include terms in each lease to protect nonmineral and noncoal mineral resources and ensure reclamation of mined lands to the applicable standards."[8] The BLM standard form coal lease (Form 3520-1) contains minimal language of the avoid-and/or-repair-damage-where-practicable variety, and comparably nonspecific conditions are found in the other standard lease forms for oil and gas, sodium, potassium, etc.[9] However, if a significant *federal* property interest could be

---

[7] *Id.* at 42598-99 (emphasis added). DOI's assessment of its powers is supported by a major congressional study. U.S. OFFICE OF TECHNOLOGY ASSESSMENT, MANAGEMENT OF FUEL AND NON-FUEL MINERALS IN FEDERAL LANDS 209 (1979).

[8] 43 C.F.R. § 3400.0-4(a)(6). The U.S. Geological Survey, Office of Surface Mining, and Fish and Wildlife Service are to participate in reviewing and developing coal lease stipulations. 43 C.F.R. § 3400.0-4(d)(4); BLM/GS/OSM, Memorandum of Understanding 16-19 (Oct. 1979); BLM/FWS, Memorandum of Understanding on Coal (Sept. 1978), in Programmatic EIS at B-7 to B-8.

[9] The coal form provides:

> Sec. 12. OPERATIONS ON LEASED LANDS—In accordance with the conditions of this lease, the exploration and mining plans, the regulations and the Act, the lessee shall exercise reasonable diligence, skill, and care in all operations on the leased lands. The lessee's obligations shall include but not be limited to the following:
>
> (a) The lessee shall conduct all operations on the leased land so as to avoid injury to life, health, or property;
>
> (b) The lessee shall conduct operations in such a manner as may be needed to avoid or, where avoidance is impracticable, to minimize and, where practicable, to repair damage to: (i) any forage and timber growth on Federal or non-Federal lands in the vicinity of the leased lands; (ii) crops, including forage and timber, or improvements of a surface owner; or (iii) improvements, whether owned by the United States or by its permittees, licensees, or lessees. The lessor must approve the steps to be taken and the restoration to be made in the event of the occurrence of damage described in the subsection.
>
> (c) The lessee shall minimize to the maximum extent possible wasting of the mineral deposits and other resources, including but not limited to, surface resources which may be found in, upon, or under such lands.

Other mineral lease forms are contained in 5 AMERICAN LAW OF MINING 1018-1185 (1961).

affected, more stringent forms may come into play.[81]

BLM will depart completely from leases and impose additional environmental stipulations as shown by the 1974 leases for the prototype oil shale program.[82] The lease itself contains significant requirements for the protection of the environment (Section 11), and incorporates 47 pages of additional "Environmental Stipulations" which detail significant on- and off-site environmental safeguards governing transportation (Section 2), fish and wildlife (Section 4), land reclamation (Section 11), and scenic and aesthetic values (Section 12).

The most significant aspect of the oil shale lease stipulations is that they *exceed any standards explicitly required by law*. Section 11 requires land reclamation, but in 1974 there were no federal or Colorado laws requiring reclamation of oil shale mining. DOI simply insisted on and received agreement to a lease condition not required by any governing statute. Such creative use of lease conditions was approved in *Hannifin v. Morton*.[83] In *Hannifin* the court ruled lease stipulations would be upheld even where there was no "express statutory authorization," so long as there was no "legislative prohibition, express or implied." Indeed, in upholding the oil shale program, the same court relied heavily on these stipulations to provide "substantial compliance" with NEPA:

> The leases contain many other, detailed environmental stipulations and provide that failure of performance by lessees constitutes a breach of lease. Thus, the leases provide comprehensive environmental protection measures to be pursued by the lessees with the prior approval of the Secretary. These terms are quite significant and compelling in relation to compliance with the mandates of NEPA.[84]

A development of considerable significance is BLM's recent rulemaking on lease-permit-easement conditions.[85] FLPMA authorizes the Secretary to regulate private use and development of public lands through leases and other instruments,[86] and to implement this, the new rules prescribe mandatory "terms and conditions" to be included in each such lease or other instrument. Mineral leasing, however, is not included because it is "covered under separate regulations."[87] On the contrary, the new rules set

---

[81] *E.g.*, Special Form 3120-2 (Oct. 1965): a printed form of additional lease stipulations to be included in oil and gas leases in U.S. Wildlife Refuges.

[82] Reprinted in ILL. DEP'T INT., FINAL ENVIRONMENTAL STATEMENT FOR THE PROTOTYPE OIL SHALE LEASING PROGRAM V-1 to V-93 (1973).

[83] 444 F.2d 200, 202 (10th Cir. 1971).

[84] Environmental Defense Fund v. Andrus, 619 F.2d 1368, 1373 (10th Cir. 1980).

[85] 43 C.F.R. § 2920 *et seq.*, 46 Fed. Reg. 5772 (Jan. 19, 1981). Along with others, this regulation's effective date was postponed to April 15, 1981, pursuant to the President's "regulatory impact analysis" order. 46 Fed. Reg. 10707 (Feb. 4, 1981) and *id.* at 19233 (Mar. 30, 1981).

[86] 43 U.S.C. § 1732(b) (1976).

[87] From the preamble to the proposed rulemaking, 45 Fed. Reg. 31284 (May 12, 1980); *see* 43 C.F.R. § 2920.1, 46 Fed. Reg. at 5778 (1981) (final).

up requirements *far more extensive and detailed than can be found in any "separate regulations" governing mineral leases.*

The rules require:

> (b) Each land use authorization shall contain terms and conditions which shall:
> (1) Carry out the purposes of applicable law and regulations issued thereunder;
> (2) Minimize damage to scenic, cultural and aesthetic values, fish and wildlife habitat and otherwise protect the environment;
> (3) Require compliance with air and water quality standards established pursuant to applicable Federal or State law; and
> (4) Require compliance with State standards for public health and safety, environmental protection, siting, construction, operation and maintenance of, or for, such use if those standards are more stringent than applicable Federal standards.
> (c) Land use authorization shall also contain such other terms and conditions as the authorized officer considers necessary to:
> (1) Protect Federal property and economic interests;
> (2) Manage efficiently the public lands which are subject to the use or adjacent to or occupied by such use;
> (3) Protect lives and property;
> (4) Protect the interests of individuals living in the general area of the use who rely on the fish, wildlife and other biotic resources of the area for subsistence purposes;
> (5) Require the use to be located in an area which shall cause least damage to the environment, taking into consideration feasibility and other relevant factors; and
> (6) Otherwise protect the public interest."

Two points are clear: (1) DOI clearly has authority to issue mandatory, binding terms and conditions for new leases; and (2) this list is more specific, more extensive, and more protective in scope than any comparable regulation yet developed in the mineral leasing area.

On this paper record DOI's position is solid and expansive. In practice, however, it is far from that. Application of the DOI's record in specific areas will be examined next.

II. LEASE CONDITIONING AUTHORITY: SPECIFIC SUBJECTS

The problems for state and local authorities are seldom framed in sweeping generalities. Concerns focus on particular problem areas. This section examines five of the most frequent concern areas. It concludes that ample federal authority exists to condition leases for the mitigation of each.

A. *Off-Site Impacts*

Federal authority to control on-site environmental impacts through lease stipulations and conditions is broad, and even the most extreme conditions have passed court scrutiny, as the above cases show. However, many of the

"43 C.F.R. § 2920.7(b)-(c), 46 Fed. Reg. at 5780-81 (1981).

most severe impacts of mining occur *off* the leased premises, on adjacent lands which may or may not be federraly owned and in surrounding communities, areas, and public facilities.[89] Some of the resistance to federal lease-condition authority over such off-site areas may be traceable to notions of "lack of jurisidiction." The law is clear, however, that the Secretary has ample authority to impose lease conditions which have the effect of regulating beyond the confines of the leased premises.

The DOI has confirmed this in its explanatory discussion of the permanent regulations implementing the Surface Mining Control and Reclamation Act.[90] In discussing the extensive statutory and regulatory controls over "adjacent areas" to the lease, the DOI's preamble explans: "[T]he Act clearly envisions regulation of impacts outside the immediate permit area. . . ."[91] Numerous sections of SMCRA require protection for off-site areas,[92] and the ACT specifically mandates that its requirements be incorporated "in any federal mineral lease."[93]

Under the Mineral Leasing Act as well, the DOI has traditionally acted to protect lands outside the lease areas, whether the lands were federal or private. Examples include section 12(b) of the standard form coal lease (Form 3520-) that requires minimizing damage "on Federal or non-Federal lands in the vicinity of the leased land." Extensive off-site requirements are also included in the oil shale lease stipulations.

When the Secretary raised off-site impacts as a justification for denying new drilling under one of the Santa Barbara Channel leases, the Ninth Circuit observed the concerns were legitimate but ones which "the Secretary should have undertaken before the lease was granted."[94] Decisions of the Interior Board of Land Appeals, as well, confirm the authority of the Secretary to reach beyond the leashold in conditioning a lessee's activities.[95]

---

[89]Programmatic EIS 5-11 *et seq.*; 1 Green River Regional EIS 187 *et seq.*; DOI/BLM, FINAL UINTA-SOUTHWESTERN UTAH REGIONAL COAL ENVIRONMENTAL IMPACT STATEMENT 133 *et seq.* (Feb. 1981).

[90]44 Fed. Reg. 14901 *et seq.* (1979). SMCRA regulations continue under heavy legal attack, holding their own for the most part; surveys of the numerous cases appear in Comment, *Western Coal Fields Declared Unsuitable for Mining Amidst Legal Challenges to § 522 of Surface Mining Act*, 11 ENVT'L L. REP. (ELI) 10048 (1981); Comment, *The 1977 Surface Mining Act Revisited: National Regulatory Program Surmounts Judicial and Legislative Challenges*; 9 ENVT'L L. REP. (ELI) 10199 (1979).

[91]44 Fed. Reg. at 14923.

[92]*E.g.*, 30 U.S.C. §§ 1258(a)(13), 1258(a)(14), 1260, 1265(b)(2), 1265(b)(10), 1265(b)(15), 1265(b)(21) (Supp. I 1977).

[93]*Id.* at § 1273.

[94]Union Oil Co. of California v. Morton, 512 F.2d 743, 751 (9th Cir. 1975) (off-site factors included pollution; effects on wildlife, plants, recreation; interference with other uses, including commercial; undesirable aesthetic effects).

[95]Eugene v. Simons, 26 IBLA 208 (1976) (rejection of competitive sodium lease because of concern over potential impacts on a nearby National Recreational Area); Cominco American Inc., 26 IBLA 329 (1976) ("it is proper to include environmental protection stipulations in a phosphate lease even though the stipulations apply to privately owned surface . . . or to privately owned lands used in conjunction with the lease"); David E. Hughes, 27 IBLA 46 (1976) (upholding special stipulation to protect wildlife habitat on adjacent public lands some 10 miles away).

Indeed, as a matter of property law, it would be unthinkable for a land owner to claim no responsibility for the effects of his land usage on his neighbors. Commendably, both the programmatic and regional EISs, by their analysis of off-site impacts, demonstrate federal acceptance of responsibility for off-site mitigation.[96]

B. *Wildlife*

The federal government's statutory mandates to protect wildlife resources are so extensive as to admit no equivocation.[97] The Bald Eagle Protection Act of 1940,[98] the Endangered Species Act of 1973,[99] the Fish and Wildlife Coordination Act of 1934,[100] the National Environmental Policy Act of 1969,[101] the FLPMA,[102] the SMCRA,[103] and a host of other laws provide an extensive series of federal obligations to protect wildlife at all stages of federal resource leasing programs. The DOI agrees, as evidenced in the Programmatic EIS[104] and in its use of both standard and special printed wildlife protection clauses in mineral leases.

The new SMCRA permanent program regulations provide extensive coverage for wildlife both on and off the lease site. In the explanatory materials the DOI states:

> [E]ach permit application must include a study of fish and wildlife and their habitats within the mine plan area and the adjacent areas where effects on such resources may reasonably be expected to occur. The area to be studied will, at a minimum, be the area to be covered by the mine plan, and may extend beyond the mine plan area to adjacent areas in which fish and wildlife and other habitats may be affected by the mining operation.[105]

DOI's general management authority to protect off-site wildlife from mining impacts of course predates SMCRA,[106] but the SMCRA adds increased specificity to the Mineral Leasing Act practices.

The federal government not only has the power to require *protection* of wildlife both on- and off-site, but to require "*enhancement* of such resources where practicable."[107] Just as protection measures may be re-

---

[96]Note 89, *supra*.

[97]U.S. COUNCIL ON ENVIRONMENTAL QUALITY, WILDLIFE AND AMERICA (1978) (particularly articles in Section IV: "Legal and Political Authority").

[98]16 U.S.C. § 668 *et seq.* (1976).

[99]*Id.* at § 1521 *et seq.*

[100]*Id.* at § 661 *et seq.*

[101]42 U.S.C. § 4321 *et seq.* (1976).

[102]43 U.S.C. § 1701 *et seq.* (1976).

[103]30 U.S.C. § 1201 *et seq.* (Supp. I 1977).

[104]Programmatic EIS at 5-112.

[105]44 Fed. Reg. 14901, 15037 (1979). The Programmatic EIS recognized the inevitability of off-site wildlife impact, at 5-107 to 5-112:

> Disturbances and modification of habitats adjacent to the areas of principal impacts would diminish with distance but . . . could encompass as much as five times the area directly disturbed. . . .

[106]*E.g.*, David E. Hughes, 27 IBLA 46 (1976) (special stipulation in sodium prospecting permit to prevent impacts on wildlife habitat on adjacent public lands).

[107]30 U.S.C. § 1265(b)(24) (emphasis added).

quired either on or off the lease site, enhancement requirements also are not confined to the lease site under SMCRA's extensive powers. Lease conditions may even require protection or mitigation for wildlife losses on *private* lands, just as DOI has required physical reclamation of private surface under its pre-SMCRA general management powers.[108]

In sum, the federal government has more than ample authority to provide wildlife protection and enhancement by conditioning its leases in a variety of ways. Examples (without being exhaustive) could include:

1. limiting the number of acres mined at any one time;
2. placing areas within the lease off-limits to mining;
3. phasing mining to maximize habitat reclamation;
4. requiring habitat replacement or enhancement on-site or, where undesirable or infeasible, requiring comparable off-site substitution;
5. conditioning lease and off-lease activities to minimize disruption on off-site affected areas.

C. *Transportation*

The impacts of mining on existing transportation facilities will be extensive, even as superficially outlined in the Green River Regional EIS.[109] Truck haulage of coal is of particular concern given its potentially extensive impacts on maintenance conditions of and costs for state and county roads in a reigion.

BLM in the Regional EIS has "assumed" that the vast majority of leased coal will be transported in Colorado by rail.[110] The assumption appears questionable, given the amount of new track required.[111] At the very least, lease stipulations are needed—either to make a reality of the rail assumption or to provide for the impacts of truck haulage on existing road ways. Ironically, the Regional EIS details, but does not make a "commitment" to just such lease conditions:

> Lease stipulations could be imposed that would assure that the state would not bear the total burden of increased road maintenance costs (up to $500,000 a year). Stipulations which could be imposed are listed below:
>
> (1) Require that lease holders transport their product by a mode other than trucks. In situations where alternative transportation modes would be cost prohibitive, the lease holder would be required to pay for maintenance of the roadway to the standards acceptable to the appropriate jurisdiction.
>
> (2) Require that all lease holders producing more than 500,000 tons of coal per year use non-highway transportation for coal movement.
>
> (3) Require the use of conveyor systems rather than trucks to transport the coal to the nearest rail line. . . .

---

[108]Montana Power Co., 17 I.D. 518 (1965).

[109]1 Green River Regional EIS at 227-30.

[110]*Id.* at 228. For all but two Colorado tracts "the assumed method of coal transportation from the mine site was rail. . . ."

[111]Many of the Colorado tracts are not now served by rail, and some would require a significant distance of new track. Green River SID at 55.

State governments can also take mitigating measures. These include:

(1) Placement of weight restrictions on roadways and bridges in affected areas.

(2) Increased licensing fees.'[113]

Two points are evident. First, any of these approaches lies within the federal agency's authority (not least because it has proposed them).'[113] Second, the choice (or choices) should be made primarily by state and local authorities, as they will be the government levels primarily impacted and in practice responsible for policing the stipulation.

Another approach would be to require, as a condition of the lease, that the lessee submit a complete transportation plan prior to operations approval. The plan could be reviewed by the state and local government and be made subject to their approval or disapproval.'[114] This approach could be used alone or in combination with the above approaches.

In sum, transportation, while not an area of extensive lease conditioning in the past, appears to be recognized by the federal government as an area of broad federal authority. Further, it is very likely courts would uphold any reasonable transportation conditions, designed to have the private lessees pay their own transportation costs. A limitation is always that the conditions do not become "so stringent as to be nugatory of the lease itself."'[115]

D. *Socioeconomic Impacts*

The serious impacts of mining on the social and economic resources of western communities has been well documented.'[116] Yet, these remain the areas in which federal officials profess to see their authority most limited.'[117]

It is true that the DOI has few express statutory authorities empowering or placing duties upon it in this area. If the analysis is combined solely to congressional enactments addressing "socioeconomic" powers *per se*, the record is slim. However, it is not bare. The Mineral Leasing Act itself places specific study duties on the Secretary:

'[113]1 Green River Regional EIS at 229-30.

'[113]In addition to the Secretary's general management powers, FLPMA may provide another avenue of authority for the Secretary to impose these and other payment conditions on some road users. 43 U.S.C. § 1762(a) authorizes the Secretary to acquire, construct, and maintain roads "within or *near* the public land" for timber "and other resources" (emphasis added). These roads, FLPMA provides, are to be financed by federal funds or "by requirements on purchasers of timber and other products . . . including provision for amortization of road costs in contracts."

'[114]Section II, 5, *infra*, discusses state and local controls, in the wake of the *Ventura County* decision, but disapproval of transportation modes is far from prohibiting the entire mine operation and clearly in the permitted area left open even by cases of *Ventura County's* strictness.

'[115]Duncan Miller, 6 IBLA 216 (1972).

'[116]*E.g.*, Programmatic EIS 5-123 *et seq.*; 1 Green River Regional EIS 198 *et seq.*; authorities note 6, *supra*.

'[117]*See* Section III, *infra*.

> Prior to issuance of any coal lease, the Secretary shall consider effects which mining of the proposed lease might have on an impacted community or area, including, but not limited to, impacts on the environment, on agricultural and other economic activities, and on public services.[118]

While the section does not require any affirmative action by the Secretary as a result of his evaluation,[119] it at least puts to rest the argument that resource agencies are not viewed as qualified to handle such considerations.[120]

Contrasted with this are the numerous federal and state impact aid programs, focusing "money solutions" on the socioeconomic impacts of mining. The Regional EIS presents a "partial list" of 65 such federal and state programs in the areas of health, housing, planning, welfare, water, waste, and multi-purpose programs.[121]

What the emphasis on "specific" authority overlooks, of course, is that the federal agency may well have the broadest authority of all in this area, precisely because its general mandate to protect the "public welfare" has not been limited by specific congressional legislation. The Mineral Leasing Act expressly gives the Secretary this broad authority: "Each lease shall contain . . . such other provisions as he may deem necessary . . . for the safeguarding of the public welfare."[122]

Few phrases in American jurisprudence convey broader grants of authority than "public welfare."[123] The lack of specific statutory authority, rather than a barrier, can be a blessing. It enables the Secretary to develop—with full lessee, state, and public input—reasonable approaches to minimizing socioeconomic impacts through the contractual process. The cases supporting sweeping secretarial authority in the area of leasing and lease conditions suggest an equally broad reading will be made of the "public welfare" requirement. The lack of specific cases interpreting that provision in the leasing context may represent nothing more than the fruits of DOI inaction over the years.

In any case, much of the apparent resistance to socioeconomic mitigation is contradicted by the Regional EIS. That EIS specifically suggests that "federal lease stipulations" and "state and local permits" could be used to require companies to: (1) "give maximum advance notice of major developments"; (2) make "contributions toward loal impact mitigation, thus shifting part of the burden from local residents to consumers of the end product"; (3) Undertake "commercial development within the communi-

---

[118]30 U.S.C. § 201(a)(3)(C) (1976).

[119]It does, however, specify that the evaluation shall not prohibit the lease.

[120]For another example, see the socioeconomic-impact evaluation and action provision in the Geothermal Energy Research, Development and Demonstration Act of 1964, 30 U.S.C. § 1145 (1976).

[121]1 Green River Regional EIS 224-26.

[122]30 U.S.C. § 187 (1976).

[123]*E.g.*, Berman v. Parker, 384 U.S. 26 (1954); Chicago & Alton R.R. Co. v. Tranbarger, 238 U.S. 67 (1915).

ties through transportation, parking, and other facilities improvements to prevent loss of that tax base."[124]

Obviously, federal lease stipulations could do much more. For example, item 1 could be expanded as a requirement that companies submit to the state and affected local governments an analysis of the socioeconomic impacts they project will be caused by their operations. Review and approval of such analyses prior to the operation stage could be integrated with applicable state and local land use and other permit reviews.

E. *Application of State and Local Law*

Compliance with state and local laws is a recurrent requirement in some federal leases, but not in others. The oil shale leases, for example, provide in section 11(a), "The lease shall conduct all operations under this lease in compliance with all applicable federal, state and local water pollution control, water quality, air pollution control, air quality, noise control, and land reclamation statutes, regulations, and standards."[125] Somewhat more restrictively, the BLM standard form competitive oil and gas lease requires compliance with "all relevant pollution control legislation at the federal, state and local level."[126] Yet, the standard coal lease form is silent.[127] The variance appears more accident than design.

It is well-settled constitutional law that the states (and through them, local governments) have considerable police powers to regulate private activities on federal lands. *Kleppe v. New Mexico*, recognized this doctrine. It held that the state police power would be overriden only if it were "in conflict" with federal law.[128]

Recognition of state regulatory authority on federal land is found in numerous parts of the law. Congress in the Mineral Leasing Act provided, "Nothing in this chapter shall be construed or held to affect the rights of the States or other local authority to exercise any rights which they may have. . . ."[129] And, in describing the Secretary's authority to place conditions on mineral leases, the Act specifically states that, "none of such provisions shall be in conflict with the laws of the State in which the leased property is situated."[130]

The legislative history of these sections "clearly indicates Congressional intent to let the State's police power govern the operations of Federal mineral lessees," provided the state requirements are not weaker than the federal.[131]

---

[124]1 Green River Regional EIS 223.

[125]ILL. OIL SHALE EIS at V-27.

[126]Bur. of Land Mgm't, Oil and Gas Lease § 2(r)(4) (Form 3120-7, Feb. 1977).

[127]Bur. of Land Mgm't, Coal Lease (Form 3520-1, July 1977).

[128]426 U.S. at 534.

[129]30 U.S.C. § 189 (1976).

[130]*Id.* at § 186.

[131]U.S. OFFICE OF TECHNOLOGY ASSESSMENT, MANAGEMENT OF FUEL AND NON-FUEL MINERALS IN FEDERAL LANDS 253 (1979).

Even more expressly, FLPMA requires that leases be subject to revocation or suspension for violation of any lease "conditions requiring . . . compliance with applicable State . . . air or water quality standard or implementation plan."[132] Likewise, SMCRA provides that it does not "supersede" any consistent "State law of regulations,"[133] and also requires that the reclamation permit process be coordinated "with any other . . . state permit process applicable to the proposed operation."[134]

However, the recent Ninth Circuit case of *Ventura County v. Gulf Oil Corporation*,[135] has raised considerable debate over applicability of state and local laws to resource ventures on federal land. *Ventura County* should present little obstacle to the continued exercise of state and local regulation of private activity on federal land given its extreme facts. In that case, Gulf Oil Corporation had a federal lease to 120 acres of the Los Padres National Forest, had requisite permits from the USDA Forest Service and the state, and had already commenced drilling operations. Ventura County, in which the federal leasehold lay, had designated the lands "open space" under its zoning ordinance, a category which prohibited oil exploration and extraction activities unless a discretionary exemption was granted through a permit. Ventura County advised the company to apply for the zoning permit, Gulf refused, and Ventura filed suit. The federal district court rejected the county's case and was affirmed by the court of appeals; the Supreme Court summarily affirmed without opinion.

The decision was promptly touted as a death knell for state and local land use regulation on federal lands, because of the Ninth Circuit's very loose statement of the issue:

> whether the County . . . can require the Federal Government's lessee . . . to obtain a permit from [the County] . . . before [the lessee] can exercise its rights under the [federal] lease. . . .[136]

While the court ruled against the county, it did not overturn the entire state and local government permit process as its overbroad statement of the issue suggests.

What the court did is considerably less shocking. Relying on the *Kleppe v. New Mexico* "conflict" rule, it found the local zoning prohibition thwarted a major congressionally sanctioned program, requiring the local law to be superseded: "Although state law may apply where it presents 'no significant threat to any identifiable federal policy or interest' . . . the states and their subdivisions have no right to apply local regulations impermissibly conflicting with achievement of the congressionally approved use of federal lands. . . ."[137] As such *Ventura County* is a classic example of extreme facts

---

[132] 43 U.S.C. § 1732(c) (1976).
[133] 30 U.S.C. § 1255(a) (Supp. II 1978).
[134] 30 U.S.C. § 1254(h).
[135] 601 F.2d 1080 (9th Cir. 1979), *aff'd mem.*, 445 U.S. 947 (1980).
[136] 601 F.2d at 1082.
[137] *Id.* at 1086.

provoking extreme law. The court was clearly influenced by the fact that the county sought not to regulate but to "prohibit" the federally licensed activity. The court specifically saw itself as "rejecting a local veto."[138]

Ventura County's "in terrorem" effect is further weakened by its failure to deal with opposed court rulings which have supported state regulation of mineral activity on federal lands, including several Supreme Court opinions.[139] Then, too, in basing its ruling on the presumed intent of the Mineral Leasing Act, the court fails to address the actual legislative history of the Act's state law preservative sections or the comparable sections of FLPMA and SMCRA. Finally, the opinion does not take into account the actual practice of federal-state-local cooperation in lease regulation.

Given the body of law and the strong supportive statements by DOI itself, this case should not bar federal lease stipulations which require compliance with all applicable state and local laws. The exception, limiting *Ventura County* to its specific facts, would be to prohibit (1) only those state or local laws which operate as a total prohibition to mining and even then (2) only where the federal land management agency joins the company in opposing the local law. Thus, the decision strictly read, says only that the state and local laws by themselves may not prohibit federally authorized mineral activity on federal lands. It does not state that the Secretary's broad discretion to limit such mining or to require application of state and local law is in any way diminished. Nor does it provide a comfortable excuse for secretarial failure to provide the same or equivalent protection.

In the EIS process, the Secretary has already taken a position which would seem to preclude application of this case to federal coal leasing. In the Programmatic EIS it is recognized that FLPMA requires the DOI to "coordinate planning activities with those of federal, state and local agencies."[140] That EIS emphasizes the "importance" of "consultation and cooperation with state governments, because only through such a cooperative effort could the Department be assured of the effectiveness of mitigation measures designed to protect against adverse social and economic impacts of federal coal management decisions."[141] The importance of the state role is continually stressed:

> By providing for extensive public participation and special opportunities for the states to take part in the leasing process from land use planning through lease sale and beyond, the Department would seek to insure that the local and regional publics and their representatives—those most knowledgeable about local and regional conditions—will always be well represented in leasing deci-

---

[138] *Id.*

[139] Wallis v. Pan American Petroleum Corp., 384 U.S. 64, 67-72 (1966); California v. United States, 438 U.S. 645 (1978); Texas Oil and Gas Corp. v. Phillips Petroleum Co., 406 F.2d 1303 (10th Cir. 1969), *cert. denied*, 396 U.S. 829 (1969).

[140] Programmatic EIS 1-16.

[141] *Id.* at 6-1.

> sions. The careful consideration of the views of the state and the comments of the public before major leasing decisions are made would serve to mitigate adverse local and regional impacts on coal development.[142]

And finally, the Programmatic EIS specifically recognizes that, by virtue of SMCRA and FLPMA: "The Department is required . . . to coordinate with and consider state and local land use and management resources programs in its own general planning processes."[143]

Even more importantly, the Regional EIS specifically relies on "state and local permits and land use regulations" to provide numerous aspects of mitigation.[144] If the Secretary rejects state and local law now, at the very least the EIS would now be vulnerable to court attack on adequacy grounds.[145]

In sum, the entire tenor of the coal EISs and planning documents is that state and local land use planning and other permit laws not only will apply but will be among the major elements in mitigating and controlling mining impacts. Insertion of a lease condition requiring compliance with state and local laws (including land use permit programs) is all the more important, given *Ventura County*, to rebut any presumption that federal authorities wish that case's logic to apply to the renewed coal leasing program.

X-47

III. LEASE CONDITIONING AUTHORITY: ACTUAL PRACTICE

Beyond the sweeping language of statutes, court opinions, and EISs lies real-world performance. Here, experiences in 1980 and 1981 suggest DOI falls far short of pursuing its full authority to use leases as a major mitigation tool.

In 1980, the State of Colorado urged the federal government to adopt detailed stipulations for the Green River-Hams Fork Region coal leases covering (1) wildlife, (2) transportation, (3) socioeconomic impacts, and (4) application of state and local law.[146] The final lease terms approved by the federal government, as well as certain other developments, demonstrate surprising timidness on the part of the outgoing Carter Administration and raise the question whether the Reagan Administration will emulate its predecessor or forge new policy directions.

---

[142] *Id.* at 6-3 to 6-4.

[143] *Id.* at 6-10.

[144] 1 Green River Regional EIS 212.

[145] *See* Gendler, *Offshore Oil Power Plays: Maximizing State Input Into Federal Resource Decision Making*, 12 NAT. RESOURCES LAW. 347, 368-87 (1979) for an interesting review of "state and local strategies for maximizing influence" in that federal leasing program.

[146] Green River SID at 7; Colorado Lessons 27, 29-31, 34, 41, appx. B-3.

A. *Off-Site Impacts*

The leases continue to recognize that impacts, as well as authority to control them, extend beyond the leasehold. No dramatic reversals in federal position are known to have occured with this concept, and its application in the past year may best be seen in the subject-specific discussions which follow.

B. *Wildlife*

Colorado and BLM officials developed a wildlife lease stipulation "satisfactory to both state and federal parties."[147] The stipulation[148] does little more, however, than transfer all wildlife protective decisions to the mining company and postpone further decisions until the mining plan stage.

The strengths of the lease provision are three. First, it specifically "require[s]" mitigation of habitat loss (for "key indicator species"). Second, it recognizes that lands "outside the permit area" may be necessary for replacement habitat. Third, it requires that "alternative methods" be analyzed.

Its weaknesses are more serious. First, it does nothing concrete to regulate the impacts, delegates the matter to a company-prepared "plan," and postpones further consideration to an unspecified future date. Second, the "methods" for wildlife protection are focused chiefly on replacement habitat and fencing; omitted are methods which would condition the mining activities instead of the animals. Third, the provision does not address mitigation of off-site wildlife impacts. Fourth, approval of the "plan" is vested solely in BLM; the state wildlife agency may "comment" and "recommend alternate . . . methods," but the lessee is free to "reject . . . the State's plan" provided it merely "indicate[s] its reasons" for so doing.

Far from maximizing federal authority to control impacts, the lease stipulation avoids and postpones consideration of those impacts. It is, for all its length, a considerably less demanding wildlife stipulation than that the federal government has required since 1965, when its own federal wildlife lands are involved.[149] Nor does the stipulation take the other acceptable course and defer to state expertise; indeed, the state is relegated to a virtually powerless role (save for its political suasion over the BLM approval process), a role that would doubtless surprise even the *Ventura County* court.

G. *Transportation*

The federal government recognized that Colorado's concern for lease controls on transportation was well-placed; the "assumption" that rail will be

[147]Green River SID at 7.
[148]*Id.* at 45–46.
[149]*Supra*, note 81.

used was recognizably faulty and the actual transportation impacts were concededly "severe."[150]

Once again, the concerns are not concretely addressed in the lease, but relegated to a company-prepared "study," postponed to the mine plan approval stage, this time without even a clear statement of the state's review role.[151] The "transportation impact mitigation study" is requried to provide only (1) mode-route-frequency estimates, (2) construction plans, (3) deterioration-repair-safety estimates, (4) a "discussion" of mitigation measures ("such as proper . . . lighting").[152]

There is no provision for approval. The BLM has only the power to make a "determination for completeness." The state's role is not mentioned except that the company's study is supported to address what it "perceive[s]" to be the "roles and responsibilities" of the various government levels.[153] This stipulation has no legitimate basis given the Regional EIS, which proposed (even if "uncommitted") vastly more substantive lease controls.[154] Indeed, federal officials in earlier stages of lease drafting specifically suggested a stipulation to "restrict the amount of coal that can be moved by truck."[155]

Sham is perhaps not too harsh a description for the final stipulation that resulted, given both federal powers and the magnitude of expected impacts. What is ironic is that another DOI agency has at the same time taken a more aggressive approach. The United States Office of Surface Mining (OSM) in 1980 approved a mine plan amendment for Colowyo Coal Company's operating federal lease in Colorado, subject to stringent transportation stipulations.[156] One "special stipulation" states: "All coal produced . . . will be transported from the mine site by railroad and no coal will be hauled from the mine site by truck. . . ."[157] Another requires a determination whether "an employee transportation system is warranted."[158] BLM's timorousness with transportation conditions is all the more unnecessary, given the mining industry's apparent willingness to cooperate with govern-

---

[150]*See* Green River SID at 6, 54-55.

[151]Bur. of Land Mgm't, "Special Stipulations" § 33(c). At this writing the transportation and socioeconomic stipulations appear only in typed form, not having been finalized apparently at the time of the Secretary's approval and publication of the SID. They are reproduced in Colorado Lessons at appx. A-2 and A-3.

[152]*Id.* § 33(c)(3)(i)-(iv).

[153]*Id.* § 33(c)(4).

[154]Text, *supra*, at note 112.

[155]Transcript, Meeting of the Federal-State Regional Coal Team at 40, *supra*, note 16.

[156]Letter and attachments from Donald A. Crane, Regional Director, OSM Region V, to Ira McKeever, President, Colowyo Coal Company (Aug. 27, 1980).

[157]*Id.* Special Stipulations, No. 1. Short term exceptions and alternative methods are allowed only on prior OSM approval. The stipulations were developed through the NEPA process; an environmental assessment is attached.

[158]*Id.* No. 5. Colowyo responded with survey data supporting its position that nothing beyond volunteer carpooling was needed, and OSM approved this as satisfying the stipulation. Letter from Crane to McKeever (undated 1981), in author's files.

ment officials and treat transportation impacts as a legitimate cost to doing business.[159]

D. *Socioeconomic Impacts*

DOI agencies have been pursuing a contradictory, almost schizophrenic, pattern with respect to socioeconomic impact mitigation. DOI documents take a reserved approach; the BLM is requiring detailed stipulations of little value; OSM has ventured into the fray with what seems an extreme requirement, then retreated; at the same time the Solicitor's Office has issued two conflicting opinions, apparently without realizing it.

While the Secretary's authority in the public welfare area may be the broadest, because least limited,[160] it remains the area in which federal officials profess to see the most uncertainties in their authority:" The mitigation of the socioeconomic impacts of coal development presents special problems for the Department, since its statutory authorities and responsibilities are far more limited than the scope of the problems."[161] This negative perception is typically advanced without any legal supporting authority or analysis. The author is not aware of any developed to date by DOI. Yet, solely as a result of this perception, DOI's approach is to minimize rather than maximize its contribution in this area: "For the time being, the Department's chief response must be improved coordination and consultation with local and state governments. . . ."[162]

The DOI's reticence is part policy, part politics. Three factors, vague notions of federalism,[163] lack of specific legislative duties,[164] and reliance on financial aid programs,[165] may account for DOI's current tendency to minimize the use of lease conditions to mitigate the socioeconomic impacts of mining.

A socioeconomic-mitigation stipulation was one of four urged by Colorado for the Green River leases.[166] The Regional EIS proposed (but labeled uncommitted) extensive requirements on industry as to notice, direct dollar contribution, and projects.[167] Two months later, however, the Secretarial

---

[159]*See, e.g.*, "ARCO gives $100,000 for Colorado Coal Road," *High Country News*, Nov. 28, 1980, at 6, col. 1.

[160]Text, *supra*, at notes 122-23.

[161]Programmatic EIS 6-5.

[162]*Id.*

[163]Federalism problems are not addressed extensively in this paper, but socioeconomic matters have traditionally been viewed as state-control issues. The DOI's deference certainly has roots, in part, in state politicians' historic insistence upon it.

[164]While a few statutes now address DOI's socioeconomic concerns (notes 118, 120, *supra*), officials' prevailing view continues to be that a "resource agency" lacks the "qualifications" to engage in social and economic regulation. Of course much the same disqualification argument was advanced against its "environmental" expertise prior to NEPA.

[165]Note the emphasis on such programs in 1 Green River Regional EIS 224-26.

[166]Green River SID at 7.

[167]Text, *supra*, note 124.

Issue Document, while still paying lip service to the seriousness of the problem, had relegated lease conditions to a minor role.[168]

The actual socioeconomic lease stipulation[169] follows a familiar pattern. As with wildlife and transportation, the stipulation does nothing concrete to regulate the impacts, relegates the matter to a company-prepared "study," postpones consideration to the mine plan approval stage, and fails to provide any clear state-input role. The "socio-economic impact mitigation study" is required to provide only (1) employee-family population estimates and (2) estimates of population impact on "county and community infrastructure" (transportation, water, sewer, schools, etc.).[170] Again, there is no provision for approval or state role.[171] This lengthy but substantiveless stipulation does not begin to reach the problems renewed leasing will unleash. It would appear "arbitrary and capricious" in the face of the findings and proposals of the Regional EIS.

It may also be a violation of contract. In 1977, the BLM entered into a "Memorandum of Understanding" (MOU) with the Board of County Commissioners of Rio Blanco County, Colorado,[172] one of the heaviest projected mining areas in the Green River-Hams Fork Region. The MOU required, *inter alia*,

1. county "participation" in federal land planning,
2. county "opportunity" to review and comment on federal applications,
3. "coordinat[ion]" of BLM and county planning and management programs,
4. "meaningful public involvement of County officials in land use decisions for public lands,"
5. that public land plans be "consistent . . . to the maximum extent possible" with county plans, and
6. that federal leases carry a stipulation requiring compliance with county laws and plans.[173]

The MOU specifically requires that the BLM: *Cooperate with the County in mitigating the socioeconomic impacts of land use activities on federal lands and with regard to federal mineral rights.*[174]

---

[168]Green River SID at 54.

[169]Bur. of Land Mgm't, "Special Stipulations" § 33(c). *See* note 151, *supra*.

[170]*Id.* § 33(c)(1), (2).

[171]*Id.* § 33(c)(4).

[172]Board of County Commissioners, Rio Blanco County, Colorado, and State Director, Bureau of Land Management, "Memorandum of Understanding" (July 5, 1977). The MOU appears as Appendix C in "Comments of the Rio Blanco Board of County Commissioners on Draft Environmental Impact Statement for Moon Lake Power Plant Project, Units 1 and 2" (March 1981) [hereinafter cited as Rio Blanco Comments]. The comments, over 100 pages, were prepared for the commissioners by the law firm of Arnold & Porter and are on file with the BLM's Utah State Office, Salt Lake City, Utah. They charge that the Moon Lake DEIS is legally inadequate, *inter alia*, for failure to address socioeconomic mitigation measures.

[173]MOU §§ II.A-K.

[174]*Id.* § II.L (emphasis added).

The county is currently alleging that the MOU conditions have been violated with respect to one mine proposal;[173] the regionwide lease stipulations have yet to be addressed, but appear equally vulnerable to a contract-based challenge.

The weakness of the BLM's socioeconomic lease stipulations can also be seen in contrast to an aggressive effort by another DOI agency. The OSM, in its approval of a Mobil Oil Corporation mine plan in Wyoming, attached its first known socioeconomic stipulation, requiring the company to provide a crime/health monitoring system for Gillette, Wyoming.[174] Mobil objected on three grounds: (1) lack of statutory authority, (2) substantial compliance, and (3) overbreadth.[175]

Ultimately, the OSM backed down and "dropped the proposed stipulation."[176] Significantly, it did so only on overbreadth and substantial compliance grounds, *insisting it had sufficient legal authority*,[177] based on an opinion from the Solicitor's Office:

> OSM involvement in the process of identification, monitoring, and mitigation of socioeconomic impacts of Federal action is clearly required for its fulfillment of responsibilities under the National Environmental Policy Act of 1969, 42 U.S.C. 4321 *et seq.* (NEPA) and its implementing regulations. . . . In satisfying its NEPA mandates, OSM must provide the Secretary with all reasonable alternatives and mitigation measures (40 C.F.R. 1502.14). . . . One of the options the Secretary has is to disapprove or defer action on a mining plan pending mitigation of certain environmental impacts, including socioeconomic impacts.
>
> . . . All reasonable mitigation measures—drafted with specificity and related directly to impacts attributable to the particular proposal under consideration—are appropriate under NEPA for presentation to the decision maker and inclusion in the ultimate decision.[178]

The opinion is noteworthy in its heavy reliance on NEPA and total lack of mention of the agency's organic statute, SMCRA.

A month after publication of the EIS the Regional Solicitor's Office in Denver issued a diametrically opposed opinion.[179] The brief memorandum concludes OSM's imposition of socioeconomic conditions is "incorrect and not legally defensible."[180] The opinion writer finds "nothing in SMCRA

---

[173]Rio Blanco Comments at 45.

[174]DOI/OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT, FINAL ENVIRONMENTAL IMPACT STATEMENT: PROPOSED MINING AND RECLAMATION PLAN, ROJO CABALLOS MINE, CAMPBELL COUNTY, WYOMING at V-57 (OSM-EIS-3, Feb. 1981) [hereinafter cited as Rojo Caballos FEIS].

[175]Mobil Oil Company Comments on the DEIS, "Attachment D," on file with OSM, Region V, Denver, Colorado.

[176]Rojo Caballos FEIS at V-57.

[177]*Id.*

[178]*Id.*

[179]Memorandum from Regional Solicitor, Rocky Mountain Region, to Regional Director, OSM, Denver, Subject: "Requiring Socioeconomic Stipulations as a Condition of Mine Plan Approval" (Mar. 16, 1981).

[180]*Id.* at 1.

authorizing" socioeconomic impacts and concludes NEPA cannot be applied since SMCRA "is *not* a discretionary act."[113] Interestingly, the opinion finds OSM's powers in "sharp contrast" to the DOI's powers under the Mineral Leasing Act, viewing the latter as "completely discretionary" in allowing reasonable stipulations, including socioeconomic.[114]

In the meantime, at least one state has gone "on record" opposing "expansion of OSM authority to include . . . socio-economic stipulations," because (1) OSM lacks "the required expertise," (2) BLM has "adequate authority . . . to so condition federal leases if required," and (3) "socio-economic concerns lie wholly within the ambit of local and state authority."[115]

It will be most interesting to see what approach the Reagan Administration pursues to resolve this quandary:

1. upgrade the effectiveness of BLM socioeconomic stipulations at the lease stage, minimizing the need for OSM actions at the mine plan stage;

2. assert authority for both agencies, risking suit by developers for not resolving the issue at the earlier stage;

3. halt socioeconomic conditioning at either or both agency stages, risking suit by state/local governments or citizens for failing to protect against the impacts.

E. *Application of State and Local Law*

Colorado's insistence on a "stipulation requiring lessee compliance with State and local laws" proved to be the "most controversial."[116] Federal officials' resistance was all the more interesting because Colorado agreed to a *Ventura County*-satisfying qualification that the state and local requirements could not "unreasonably prohibit exploration or mining."[117]

The Secretary rejected the state's stipulation and instead approved the standard: "Lessee shall comply with all *valid and applicable* laws and regulations of Federal, State, and local governmental authority."[118] A

---

[113] *Id.* at 1-2 (emphasis in original).

[114] *Id.* at 2.

[115] Letter from Hamlet J. Barry, Deputy Director, Colorado Dep't of Nat. Resources, to John Hardaway, Office of Surface Mining, Denver (Dec. 17, 1980).

[116] Green River SID at 8. Colorado had the support of the Coal Committee of the Western Interstate Energy Board, the key body through which the western states responded to the federal coal management program. Colorado Lessons 5, 30-31. The WIEB Committee urged that BLM lease stipulations require (1) lessee compliance "with all specified state and local land use, siting and environmental laws"; (2) local governments be kept informed of development plans, and (3) lessees be encouraged to work with those governments on specific problems. *Id.* at appx. B-3. However, this recommendation "was not pushed to a vote" before the Federal-State Coal Advisory Board (federal-state representatives on the 12 regional coal teams), presumably for fear of failure, and thus did not go on to the Secretary as an Advisory Board recommendation. *Id.* at 30.

[117] *Id.*

[118] *Id.* at 12 (emphasis added).

secretarial memorandum and a Solicitor's opinion are appended[189] against which the stipulation must be construed. Both stress that this language was chosen because it is "commonly" used in leases (boilerplate) and should be given its "conventional and obvious construction."[190]

The effect of *Ventura County* remains unsettled but with the clear implication that the United States has no "intention" of "waiv[ing]" its potential for nullifying state and local law.[191] Thus, the stipulation resolves nothing from the state's perspective; either the lessee or the federal lessor or both may claim a particular state or local law is not "valid" or "applicable" under *Ventura County*. Given the wide areas for state-local law application arguably left open by *Ventura County*,[192] the federal stipulation once again defers rather than resolves a major problem, increasing the uncertainties companies and local officials will face in the coming years.

On the positive side, the Reagan Administration has not locked itself in to a firm position opposed to state-local law application, and may in subsequent opinions and actions clarify the extent to which these controls can apply. If it does not, it faces legal attack on several grounds:

1. The Regional EIS's adequacy could now be attacked, because it relies expressly and extensively on "state and local permits and land use regulations" to provide numerous aspects of mitigation.[193]

2. The applicability of *Ventura County* itself is open to attack in particular state-local law contexts.[194]

3. The "contract violation" challenge could surface, since the BLM-Rio Blanco MOU[195] specifically requires BLM *without qualification* (1) to insert in all leases a stipulation requiring that lessees conform to specified county planning ordinances and (2) to provide for compliance with all state and county pollution laws.[196]

Given the political rhetoric and realities of the "Sagebrush Rebellion," it will be interesting to see if the Reagan Administration moves to strike the balance on this issue closer to the state-local law interest or perpetuates the Carter Administration's policies.

IV. THE DUTY TO CONDITION LEASES

The preceding analysis demonstrates that the federal government has ample *authority* to condition resource leases to protect social, economic, and environmental values. Legally, not all authority or power, however strong,

---

[189] *Id.* at 69 and 70-71, respectively.
[190] *Id.*
[191] *Id.* at 71.
[192] Text, *supra*, notes 137-40.
[193] Text, *supra*, notes 144-45.
[194] Text, *supra*, notes 137-40.
[195] *Supra*, note 172.
[196] *Id.* §§ II.D, K. Section II.H adds that "to the maximum extent possible" leases shall

gives rise to a corresponding *duty* to exercise that power. In theory, the agency might concede it has the power but deny any duty to exercise it, either as to lease conditions generally or as to specific categories.

DOI's largely ineffective utilization of stipulations, to date, raises the question whether the agency conceives itself under a legal duty or not. Duty, in one sense, can be described as a function of others' willingness to enforce action judicially. The real question is: if the Secretary refuses to adopt a state-requested lease condition, would a court of law require him to act if the state or other affected parties brought suit?

The answer seems clearly affirmative under the Mineral Leasing Act, FLPMA, and NEPA respectively.

The Mineral Leasing Act appears at first ambiguous on the subject. On the one hand, it makes mandatory ("shall contain") the inclusion in leases of conditions "necessary . . . for the safeguarding of the public welfare."[197] However, it leaves the determination of "necessity" to the Secretary ("as he may deem necessary").[198] Therefore, a technical argument could be made that the "agency action is committed to agency discretion by law," thereby exempt from court review.[199] The decided lease-condition cases[200] have not routinely addressed this issue, because they typically involve challenges against conditions the Secretary has decided to impose, not challenges to the Secretary's failure to impose a condition. The courts' willingness to review the affirmative exercise of this discretion may well dispose of the question as a practical matter.

Moreover, the mere presence of discretion in a statute by no means automatically insulates the agency from court review.[201] "This is a very narrow exception,"[202] particularly inapplicable where:

1. there is "law to apply"[203] (such as the standards throughout the statutes and regulations);

2. there is no legislative intent to restrict judicial review of lease terms;[204]

3. there is statutory authority for courts to review "an abuse of discretion."[205]

---

not exempt lessees from compliance with other county plans, laws, and regulations in effect on the date of the lease.

[197]30 U.S.C. § 187 (1976).

[198]*Id.*

[199]Administrative Procedure Act, 5 U.S.C. § 701(a)(2) (1976).

[200]*E.g.*, cases, *supra*, notes 51-57. Compare Udall v. Tallman, 380 U.S. 1 (1965).

[201]Saferstein, *Nonreviewability: A Functional Analysis of "Committed to Agency Discretion,"* 82 HARV. L. REV. 366 (1968).

[202]Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 410 (1971).

[203]*Id.* S. REP. No. 758, Senate Committee on the Judiciary, 79th Cong., 1st Sess. 26 (1945).

[204]On the contrary, the courts typically read the intent otherwise. Barlow v. Collins, 397 U.S. 159, 165-67 (1970) (Secretary of Agriculture's authority to adopt regulations "as he may deem proper" not a congressional signal of nonreviewability).

[205]5 U.S.C. § 706(2)(A) (1976); *see* Littel v. Morton, 445 F.2d 1207 (4th Cir. 1971) (discretion to deny attorney compensation); Berger, *Administrative Arbitrariness: A Synthesis,*

Similarly, under FLPMA, the Secretary's power to adopt regulations and impose protective lease conditions, while having an obvious discretionary element, would not apear to be closed to judicial review. Section 302(b) mandates that the Secretary "shall . . . regulate" use, occupancy, and development of the public lands through "leases" and other instruments he "deems appropriate."[206] Section 302(c) requires lease provisions for revocation or suspension or violation of any term or condition.[207] And the Act also provides the Secretary "shall, by regulation *or otherwise*, take any action necessary to prevent unnecessary or undue degradation of the lands."[208]

Finally, NEPA imposes a further, explicit "duty" on the Secretary, making environmental protection part of the fundamental "mandate" of that agency.[209] Socioeconomic impacts are expressly included in the NEPA mandate.[210] The Solicitor's Office has recognized and relied on this mandate and found no statutory conflict preventing full BLM compliance.[211]

Regulations implementing NEPA specifically require mitigation measures for environmental impacts,[212] as well as "cultural, economic, social, or health [impacts] whether direct, indirect or cumulative."[213] For such mitigation, the regulations make mandatory that the lead agency "*shall*" "*include appropriate conditions* in grants, *permits or other approvals.*"[214]

The issue of the Secretary's duty then could easily be raised in the NEPA context, where court review is clearly established. The decision in *North Slope Borough*,[215] even while denying an injunction on its facts, demonstrates that

---

78 YALE L.J. 965 (1969); Davis, *Administrative Arbitrariness is Not Always Reviewable*, 51 MINN. L. REV. 643 (1967).

[206] 43 U.S.C. § 1732(b) (Supp. II 1978). Compare the even more mandatory requirements for rights-of-way:

> Each right-of-way shall contain—(a) terms and conditions which will (i) carry out the purposes of this Act. . . ; (ii) . . . protect the environment . . . ; (iv) require compliance with [more stringent] State standards for public health and safety, environmental protection, siting, construction, operation, and maintenance. . . .

Id. at § 1765.

[207] 43 U.S.C. § 1732(c).

[208] 43 U.S.C. § 1732(b) (last sentence).

[209] *E.g.*, Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 558 (1978); Flint Ridge Development Co. v. Scenic Rivers Ass'n, 426 U.S. 776, 787-88 (1976); Calvert Cliffs' Coordinating Committee, Inc. v. AEC, 449 F.2d 1109, 1112 (D.C. Cir. 1971); Grindstone Butte Project v. Kleppe, 638 F.2d 100, 103 (9th Cir. 1981) (BLM right-of-way conditions); Comment, *Charting the Boundaries of NEPA's Substantive Mandate: Strycker's Bay Neighborhood Council, Inc. v. Karlan*, 10 ENVT'L L. REP. (ELI) 10039 (1980).

[210] Hanly v. Mitchell, 460 F.2d 640, 647 (2d Cir.), *cert. denied*, 409 U.S. 909 (1972) (NEPA's "environmental considerations" cover, *inter alia*, "noise, traffic, . . . mass transportation, . . . crime, congestion, . . . drugs, . . . 'high density urbanization [and] industrial expansion'.") CEQ Regulations, 40 C.F.R. § 1508.8 (1980).

[211] *Compare* the OSM opinion in Rojo Caballos FEIS at V-57 *with* Regional Solicitor's evaluation of BLM, *supra*, note 181.

[212] 40 C.F.R. §§ 1502.14, .16 (1980).

[213] *Id.* § 1508.8.

[214] *Id.* § 1505.3 (emphasis added).

[215] Text, *supra*, notes 70-74. *See* Defenders of Wildlife v. Andrus, 627 F.2d 1238 (D.C. Cir. 1980) (secretarial "inaction" held not to trigger NEPA duties).

the federal courts will closely scrutinize leasing programs where protective conditions have been inadequately analyzed in the EIS. The Secretary is unlikely to claim a lack of duty if it could lead to a legal challenge to the entire coal program.

On the contrary, the "stars governing our conditions" should be positively stimulated to cure these defects through a creative federal-state partnership to develop sound leasing stipulations—to protect both the program and the public.

A Narrow Interpretation of the Secretary's Section 30 Authority to Mitigate

The following article (Exhibit 14) authored by John R. Little, former Regional Solicitor for the Rocky Mountain Region, Department of the Interior, entitled "Stipulations in Mineral Leasing Act Leases: Power to Spare or Spare Power?" appeared in Resource Law Notes, The Newletter of the Natural Resources Law Center, University of Colorado, School of Law, No. 7, January 1986, and is reprinted with the permission of the copyright holder. Mr. Little's article raises a number of questions regarding the statutory and other legal authority of BLM to impose mineral lease stipulations requiring mitigation of off-lease socioeconomic impacts. Mr. Little argues that the "public welfare" clause of section 30, absent a more detailed statement, is an insufficient basis to justify imposition of such stipulations; and he contrasts this general, vague language with that of right-of-way grants under section 505 of FLPMA (43 U.S.C. 1765 (1982)), which explicitly gives BLM authority to impose stipulations to comply with State public health, environmental and siting standards on public lands adjacent to the right of way.

Stipulations in Mineral Leasing Act Leases: Power to Spare or Spare Power?

By John R. Little, Jr.

***Jack Little** is an attorney with the Denver office of Duncan, Weinberg & Miller. He was formerly Regional Solicitor, Rocky Mountain Region, and Associate Solicitor, Energy and Resources, of the Department of the Interior. The following article is a development of part of his presentation on "Lands Available for Mineral Leasing" at the June 1985 Conference on Public Lands Mineral Leasing: Issues and Directions.*

Red tape and fine print are as much a part of the average American's perception of their government as the Washington Monument and Lincoln Memorial are central to their minds-eye vision of the District of Columbia. It may, therefore, seem incongruous to suggest that mineral lease stipulations—the very essence of government fine print—may rapidly be becoming among the most controversial aspects of the administration of the venerable Mineral Leasing Act of 1920. However, a few moments reflection will suggest that although Leasing Act leases have historically contained a lot of verbiage, most of this has simply executed the statute and the regulations or has provided for housekeeping details. As such, most of the provisions in the average lease have not been of major independent, economic or operational significance to either the lessor or lessee. It is the author's view that this is no longer the case and that stipulations are now much more important to lessor and lessees because they are becoming more pervasive in addressing not only on-lease activities but alleged off-site impacts as well.

Changes in Public Land Management

In significant part, this recent increase in the use of lease conditions is merely a reflection of a gradual but substantial change in the self-perceived role of the Bureau of Land Management in the past decade and a half. The Department of the Interior and its constituent General Land Office were established originally as the instruments of execution of the early policies of encouragement of settlement and disposal of the public lands. Beginning about the time of passage of the Taylor Grazing Act in 1934 (43 U.S.C. § 315 *et seq.*), however, the Department and the BLM gradually began to think of themselves more as land use planners and managers than as disposers of the public lands. This change in philosophy was confirmed in the Federal Land Policy and Management Act of 1976 (FLPMA), which stated clearly that the remaining public lands were to be retained in federal ownership and managed on a multiple use and sustained yield basis unless there were substantial reasons in the national interest that required the disposal of a particular tract. (43 U.S.C. § 1701.) Section 202 of the Act also required that BLM expand its prior management practices through the establishment of an extensive land use planning system as to these retained lands. (43 U.S.C. § 1712.) Six years earlier, Congress had passed the National Environmental Policy Act, which required the preparation of environmental assessments and impact statements when significant federal actions were being proposed or considered (42 U.S.C. § 4332).

Partly as a result of the paperwork explosion brought about by NEPA compliance and FLPMA mandated land use planning but also partly in response to outside political influences and internal policy changes, the decision-making process of both the Department and BLM have generally become more complex and convoluted over the past fifteen years. This has sometimes made the Department and BLM appear "muscle bound" or as if they had become entangled in their own paperwork and procedural underwear. A further complication is that BLM actions and decisions have also become much more controversial and subject to litigative challenge. In practical terms, this combination of events and forces has dictated major changes in the manner in which federal mineral leases are issued and administered.

Increased Use of Lease Stipulations

One of the major consequences of all of these changes in emphasis is that BLM is more frequently utilizing stipulations as a means of executing their land use planning and management determinations in a wide array of contexts, including Leasing Act leases. To be fair, it should also be noted that the Department and BLM are under heavy pressure to extensively stipulate, particularly by environmental groups and state and local authorities. These interests argue, for example, that leases should contain provisions requiring that the Department attempt to enforce state and local legal requirements as lease conditions or clauses requiring lessees to address and/or provide for remote off-site socioeconomic impacts of lease development on the community generally such as the costs of roads, schools, water supply, sewers, law enforcement and the like. See Pring, *Power to Spare: Conditioning Federal Resource Leases to Protect Social, Economic and Environmental Values,* 14 Nat. Res. Law 305 (1981); Barry, *The Surface Mining Control and Reclamation Act of 1977 and the Office of Surface Mining: Moving Targets or Immovable Objects,* 27A Rocky Mtn. L. Found. 169, 320-24 (1982).

A further complication is that stipulations are also appearing more often in post-lease, administrative decisions such as approvals of Applications for Permission to Drill, or mining or operation plans. When such conditions impose significant cost-increasing requirements, questions are raised as to whether fundamental post-award alterations of the lease terms are authorized.

Lastly, there exists a rather virulent virus in the Department of the Interior that, in its most extreme form, holds that there are virtually no limits to the Department's authority to stipulate as to almost anything, at any time in the process—on or off-site.

Given all of these sometimes conflicting currents and cross currents, it is clearly evident not only why stipulations to Mineral Leasing Act leases are increasingly employed by BLM but also why their pervasive use has become increasingly controversial, particularly when they address remote, off-site impacts, when they are attached post-lease or, whenever imposed, they cause substantially increased costs of exploration, development or operation.

Statutory Authority

What is the statutory base for inserting conditions in mineral leases? The answer is that it is essentially sparse and very general in nature. For purposes of contrast, attention is drawn to Section 505 of FLPMA (43 U.S.C. § 1765) relating to grants of rights of way, which contains a very broad state-

ment of authority for stipulations including, among other things, minimizing damage to scenic and esthetic values or otherwise protecting the environment, compliance with State public health, safety, environmental and siting standards and protecting the public interest in lands adjacent to the right of way. The Acquired Lands Mineral Leasing Act (30 U.S.C. § 352) also contains a specific direction that leases issued thereunder *shall* be ". . . subject to such conditions as the . . . [managing agency] . . . shall prescribe to insure the adequate utilization of the lands for the primary purposes for which they have been acquired or are being administered."

The analysis of the authority to stipulate under the 1920 Act starts with Section 17 (30 U.S.C. § 226[a]), which states that public lands "*may* be leased by the Secretary." The second is Section 32 (30 U.S.C. § 189) which authorizes the Secretary to promulgate "necessary and proper" rules and regulations providing for administration of the Act and leases issued thereunder. Thirdly, Section 30 (30 U.S.C. § 187) requires that each lease shall contain provisions relating to diligence and care of operations; hours, wages, conditions of employment, and safety and welfare of miners and minors; prevention of undue waste; sale at reasonable prices; prevention of monopoly; "protection of the interests of the United States"; and "safeguarding the public welfare." Obviously, these two latter, very general provisions suggest little in the way of guidance to either lessee or administrator as to the permissible scope of stipulation. What other arguable sources of authority are there?

Other Sources of Authority

First, there is the "broad discretion of the Secretary." See *Udall v. Tallman*, 380 U.S. 1 (1965). This, of course, is yet another of those favorite refuges of scoundrels and Interior Solicitors akin to apple pie, the stars and stripes or even, "the check is in the mail." Yet "broad discretion" clearly has to be reckoned as a further, partial source of authority at least.

The second derives from "broad discretion." This is that leasing with stipulations is a lesser, included power implicit in the concept of discretion, i.e. in lieu of refusing to lease.

The third is the precept that a lease is a contract and the lessee has the option to either accept or refuse the lease as stipulated.

A fourth is that stipulations are a proper method of the exercise of the very broad, sovereign power of the Secretary to regulate uses of the public lands. See *Kleppe* v. *New Mexico*, 426 U.S. 529 (1976).

A fifth is that stipulations are simply a form of regulation authorized by 30 U.S.C. § 189. (See e.g. 43 C.F.R. §§ 3101.1 and 3101.1-2.)

A sixth is that they are authorized by the NEPA provision that requires that existing federal policies, regulations and statutes be construed as to sanction reasonable provisions for environmental protection. See 42 U.S.C. § 332. But this NEPA direction to broadly construe has been held to be limited in scope as applied to Mineral Leasing Act actions. See, *Natural Resource Defense Council* v. *Berklund*, 609 F. 2d 553 (D.C. Cir. 1980).

Beyond this there are also a number of specific statutes and regulations that purport to authorize use regulation to varying degrees such as: wild and scenic rivers (16 U.S.C. § 1280 [a]); designated wilderness areas (16 U.S.C. § 1133[d][3]); BLM wilderness study areas (43 U.S.C. § 1782); endangered species (16 U.S.C. § 1531 *et. seq.*); and recreation areas administered by the National Park Service (36 C.F.R. Part 9).

There also should be noted a further provision which may cast some doubt upon the argument for stipulations addressing remote, off-site socioeconomic impacts. This is 30 U.S.C. § 191 which gives 50 percent of the Government's Mineral Leasing Act revenues to state and local governments. Some of the legislative history of this provision suggests that it was intended to be *the* federal contribution to local governments for the impact of federal mineral development. See e.g. 50 Cong. Rec. 7769, 7773-4 (1919) H.R. Rep. No. 94-681, 94th Cong., 1st Sess. 19 (1975), 1976 U.S. Code & Congressional Adm. News at 1955.

Where Are We Headed?

With this background there are several points that should be made. First, the days of automatic lessee acceptance of any lease stipulations that someone in BLM might dream up are over, in part because of increased lessee awareness of stipulation authority issues. We can consequently expect much more dispute and litigation on the subject. Second, the internal and external pressure on BLM to extensively stipulate to address issues raised during NEPA compliance or the FLPMA land use planning process will continue. Third, with the depressed state of the coal market, disputes and litigation about the closely related issues as to the scope of permissible charges in coal lease stipulation during the readjustment process under Section 7 of the Act (30 U.S.C. § 207), as amended by FCCLA in 1976 will continue. See e.g. *Coastal States Energy Co.*, 70 IBLA 386 (1984), appeal pending *Coastal States Energy Co.* v. *Watt*, C 83-0730 J (C.D. Utah, filed 6/3/83).

Beyond these relatively easy predictions, since there has been very little case law on the subject, it is anyone's guess how the law will come out after the litigation is over. Nevertheless, the author will be foolhardy enough to suggest some thoughts which he believes are likely to be featured in future decisions on the subject.

First, there are limits to how far the "protection of the interests of the United States" and "safeguarding the public interest" language of Section 30 of the statute can be stretched. Unless Congress can be persuaded to broaden and expand the present BLM authority base along the lines of Section 505 of FLPMA or the Acquired Lands Act section previously noted, many of the requirements that are finding their way into leases at present do not have reasonable linkage to protection of legitimate federal on-site interests or a specific statutory or regulatory authorizations may not be sustained. We are beginning to see some of this from the IBLA already. See e.g. *Blackhawk Coal Co.*, 68 IBLA 96 (1982); *Gulf Oil Corp. et al.*, 73 IBLA 328 (1983); *Coastal States Energy Co.*, 81 IBLA 171 (1984); and, *Sunoco Energy Dev. Co.*, 84 IBLA 131 (1984).

Second, if stipulations are soundly related to site specific physical conditions, are not overly heavy handed or unreasonable, they probably will be enforced.

Third, excessive stipulations which substantially limit or prevent operations are likely to be challenged. As an example, attention is called to the several thousand leases that have been issued by Interior within BLM Wilderness Study Areas being administered under FLPMA section 603(c) with no surface occupancy stipulations. While isolated instances of this practice might be justified on the basis of site-specific facts (such as the possible ability to develop a particular tract by slant drilling or a need to block up acreage, or the like), it is hard to justify widespread leasing on a "giving with the right-taking away with the left" basis even if the "take it or leave it," contract-based justification is swallowed whole. It

is suggested that the issuance of such leases may, in fact, be a perversion of discretion since it would seem doubtful that they convey *any* interest in the land and are thus mere shells. Perhaps the Department should not issue a lease rather than promulgate one that is arguably a sham. It was therefore interesting to see that the Department recently adopted 43 C.F.R. § 3101.1-2 which says, in part, that mineral leases will be issued only if the stipulations will not absolutely bar exploration of the resource and extraction is technically feasible. But then, the regulation adds: "or the lease, as stipulated, is acceptable to the lessee." Some read *Conner v. Burford*, 605 F. Supp. 107 (D.C. Mont. 1985); *Sierra Club v. Peterson*, 717 F. 2d § 409 (Ca. D.C. 1983); and, *Rocky Mountain Oil and Gas Assn.* v. *Watt*, 696 F. 2d 734 (10th Cir. 1983) as supporting the general use of no surface occupancy stipulations. This construction of these cases is unconvincing to the author.

Fourth, as to general socioeconomic clauses, unless they are simply reflections of provisions generally applicable (e.g. nondiscrimination in employment) or can be shown to have a solid nexus to a specific statutory base, they may be in trouble. As a specific example of these socioeconomic issues, the fascinating subject of cultural-historical-archeological resource survey and preservation stipulations comes to mind. While it is tempting to deal with the subject in detail, it will suffice to suggest that unless there is strong evidence that the bones of General Custer or some historical, cultural or archeological find of similar dignity are located on the lease premises, there is little obvious legal justification for a pervasive stipulation requiring, for example, the employment of a full-time archeologist on site for the complete lease term or a full, pre-drilling cultural-historical survey of the entire lease tract. Certainly, there are good and sufficient reasons to require lessees to take reasonable steps to identify and protect these kinds of resources if they are found on the public domain. The trouble is that these legitimate objectives have been prostituted by overextension, largely by the professional in and out-house historical-archeological lobby. The Act (§ 106 of the National Historic Preservation Act, 16 U.S.C. § 470f) merely says that the Agency head shall "take into account the effect" of any federal undertaking on any historical site or structure included or eligible for inclusion on the Register and shall give the Advisory Council the opportunity to "comment" on such undertakings. See also Executive Order 11593 (May 13, 1971) and 36 C.F.R. Part 800. It is thus very difficult for the author at least to see how the Act authorizes a requirement that a lessee must develop the evidence as to whether or not there is a historic site or structure on the lease so that it can be nominated, accepted on the Register, commented upon and then be "taken into account."

Fifth, the more tenuous and distant the nexus between the authorizing statute and the stipulation, the greater the risk of it being upset in litigation.

Sixth, the less stipulations address physical on-site conditions and the more they are concerned with off-site matters, the greater chance the lessee has of successful challenge. The supporters of a more liberal reading of the Secretary's stipulation authority find comfort in *National Res. Defense Council v. Berklund*, 609 F. 2d 5531 (D.C. Cir. 1980) and *Sierra Club v. Peterson, supra*. While it is granted that there is some language in both cases suggesting that use of stipulations may be a way of dealing with issues raised in the NEPA process, it is the author's view that the cases are being overread if interpreted much farther than that.

Seventh, since the lease is a contract, overaggressive postlease administrative actions may give rise to breach damages or injunctive relief. The cited cases resulting from the 1969 "blow out" in the Santa Barbara channel clearly suggest that there are limits to the postlease power of the Secretary to regulate, particularly if such stipulations cause major postlease cost increases or unreasonable delay. See *Gulf Oil Corp.* v. *Morton*, 493 F. 2d 141 (9th Cir. 1973); *Union Oil Co. of Calif.* v. *Morton*, 512 F. 2d 743 (9th Cir. 1975); and *Sun Oil Corp.* v. *United States*, 572 F. 2d 786 (Ct. Cl. 1978).

Eighth, there are limits to the Secretary's implied sovereign powers to regulate land uses. Specifically, DOI should be concerned about instances where the Secretary has, with his discretionary leasing hat on, issued coal leases for lands that are only suitable for surface mining development and has then, with his zoning, land use, regulatory or sovereignty hat on, designated them unsuitable for surface mining or as unmineable alluvial valley floors under SMCRA. The recent *Whitney Benefits* case strongly suggests that this sort of power must be exercised with caution and restraint. *Whitney Benefits, Inc.* v. *United States*, 752 F. 2d 1554 (Fed. Cir. 1985).

Last, leaving aside any consideration of the kinds of dual sovereignty issues arising out of arguments as to the meaning of *Ventura County* v. *Gulf Oil Corp.*, 601 F. 2d 1080 (9th Cir. 1979) affd. 445 U.S. 947 (1980), there are serious legal and policy concerns with the assertion that violations of state and local laws and regulations should be reasons for assessment of federal civil penalties or cancellation of federal leases. It would not seem to be a seemly posture for the United States to, in effect, "throw its weight around" by attempting to enforce state and local tax laws, state or local roadway load limits, local zoning laws, or the like. State and local governmental units have plenty of enforcement weapons and abundant power to tax already. They don't need Uncle Sam to do their enforcement for them.

Summing up, the use of stipulations is a most reasonable, effective, efficient and straightforward method of exercising the wide range of legitimate discretion which the law accords to the Secretary under the 1920 Act. The trouble is that there seem to be many, both in and out of the Department of the Interior, who erroneously view the authority to stipulate as being essentially unlimited in time and scope and who have attempted to use stipulations as a way of "dealing with" a lot of peripheral or remote problems or to feather their own parochial policy nests. In my judgment, in so doing, they have at times overreached the reasonable limits of the Secretary's authority base. To this point, these indiscretions have gone largely unchallenged because lessees have swallowed hard, have rejected the expense, delay and hassle of litigation, and have grudgingly accepted the stipulations. Those days are over, in my view.

The Natural Resources Law Center

The Natural Resources Law Center was established at the University of Colorado School of Law in the fall of 1981. Building on the strong academic base in natural resources already existing in the Law School and the University, the Center's purpose is to facilitate research, publication, and education related to natural resources law.

For information about the Natural Resources Law Center and its programs, contact:

Lawrence J. MacDonnell, Director
Katherine Taylor, Executive Assistant
Fleming Law Building
Boulder, Colorado 80309-0401
Telephone: (303) 492-1286

Shell Oil Company Comments on the Secretary's Responsibilities for Off-Lease Impacts of Mineral Development Under Section 30 and His Indian Trust Responsibilities

The following Shell Oil Company comments (Exhibit 15) were written in response to Northern Cheyenne proposals for special socioeconomic coal lease stipulations included as an Appendix to the Draft Environmental Impact Statement (EIS) for Round II Powder River Coal Leasing. Shell discusses two aspects of the Secretary's responsibilities for off-lease mitigation of Federal coal leasing activities: (1) the authority of Interior to impose stipulations in coal leases under the Mineral Leasing Act and (2) the trust responsibility of the Secretary of the Interior toward Indians. Thus, they address both the Northern Cheyenne Tribe's proposals and Pring's arguments.

Shell's comments oppose the Northern Cheyenne Tribe's proposals, which were made consistent with its position in the Round I Powder River lease sale suit. As discussed above, the Tribe in Northern Cheyenne has successfully challenged the original Round I Powder River Basin EIS in the Federal District Court for the District of Montana for failure of the Secretary to adequately consider the off-site impacts to its reservation and, if such consideration indicates adverse impacts, implement measures to mitigate such impacts. However, Shell's comments are not necessarily inconsistent with the Northern Cheyenne decision. Shell acknowledges the duty of the Secretary to adequately consider the effects from mineral leasing on Indians under NEPA and his Indian trust responsibilities. Though the court held that the Secretary must implement mitigation measures if, after consideration of the off-lease impacts, he identified "deleterious

impacts" to the reservation, it did not expressly require the Secretary to develop lease stipulations that mitigate such projected off-lease impacts to the reservation. The court thus left open the method(s) by which the Secretary was to implement mitigation measures to alleviate such forecasted, identified, adverse, off-lease socioeconomic impacts to the Northern Cheyenne reservation.

As noted in the introduction to this chapter, because this issue has not yet been addressed in any court decision, there is no clearcut answer as to the extent of the Secretary's section 30 "public welfare" authority to impose socioeconomic mitigation stipulations on Federal mineral lessees, though the Board of Land Appeals decision in Blackhawk clearly turned on the majority's interpretation of such authority in section 30 as it applied to physical damage mitigation stipulations.

Whether and to what extent such socioeconomic stipulations are authorized under section 30 will depend on the facts of each case and the reasonableness and clearness of such stipulations examined in ther totality; e.g., the nexus of lease activity to the socioeconomic impact(s); whether the stipulations attempt to enter an area of private tort/nuisance law governed by State authority; whether such stipulations will in effect preclude or unreasonably interfere with mineral development; and what sanction(s) will be imposed for violation of the stipulations (lease cancellation, suspension of activities, monetary penalties).

ATTACHMENT TO
COMMENTS OF SHELL MINING COMPANY OPPOSING THE PROPOSED LEASE STIPULATIONS SUGGESTED BY THE NORTHERN CHEYENNE TRIBE CONTAINED IN DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR ROUND II COAL LEASE SALE IN THE POWDER RIVER REGION

LEGAL ANALYSIS

The Interior Department Does Not Have a Legal Duty to Fashion or Adopt Measures to Mitigate the Adverse Impacts of the Proposed Powder River Regional Coal Development

In their proposed lease stipulations (set forth in Appendix F to the Draft Environmental Impact Statement dated January 1984 for Round II Coal Lease Sales in the Powder River Region) the Northern Cheyenne Tribe asserts that "The Department of the Interior is obliged to consider, fashion, and adopt measures to mitigate the adverse impacts of the proposed Powder River Regional Coal Development." It is the conclusion of this analysis that, at most, the Interior Department's responsibilities extend to considering mitigation measures. No legal requirement that the Department fashion or adopt such measures is cited by the Tribe. The Mineral Lands Leasing Act, on which competitive coal leasing is based, sets forth only the very general standard that federal coal leases may contain provisions ". . . for the protection of the interest of the United States . . . [and] for the safeguarding of the public welfare. . . ." 30 U.S. CODE §187. The regulations implementing the Mineral Lands Leasing Act, insofar as competitive coal leasing is concerned, only mention mitigation one time, and this reference fits under the heading of considering mitigation rather than being an affirmative obligation to fashion or adopt mitigation measures. The regulations state:

> Public hearings shall be held in the region following the release of the draft environmental impact statement to announce and discuss the results of the ranking and selection process and the potential impacts, including proposed mitigation measures.

43 C.F.R. §3420.3-4.

It is instructive to note that in regulations governing other activities, such as outer continental shelf leasing or oil and gas leasing in Alaska, when the Interior Department has imposed a duty to develop mitigation measures, the language is

very clear. For example, in the OCS area, the Director is required to "develop measures, including lease stipulations and conditions, to mitigate adverse impacts on the environment." 43 C.F.R. §3315.1. The absence of such language in the competitive coal lease sale area would strongly imply that the obligation on the Interior Department to develop such mitigation measures does not exist.

Rather, the BLM's obligations in connection with competitive leasing are to thoroughly consider environmental impacts, including economic and sociological impacts, and to consult with Indian tribal governments which administer lands in or near the area under consideration. 43 C.F.R. §§3420.1-7 and 3420.2(c)(2). The Draft EIS itself indicates that the BLM is clearly meeting these requirements.

Further, the National Environmental Policy Act does not require the Department to go beyond a thorough analysis and consideration of the environmental impacts of various alternative actions. Stryker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223 (1980). The Draft Environmental Impact Statement in question does comprehensively consider the environmental impacts of various levels of leasing. Anticipated economic and social impacts are included in this analysis including the projected impacts on the Northern Cheyenne. This analysis is all that is required by NEPA.

Moreover, while the Northern Cheyenne refer to the Interior Department's trust responsibility toward Indian tribes, it would be a great expansion of this trust responsibility for it to mandate the lease stipulations in Appendix F. Of course, the trust responsibility of the federal government toward Indians generally applies to federal actions on the reservations themselves. See, generally, F. COHEN, HANDBOOK OF FEDERAL INDIAN LAW (1982 ed.) 220-28; Seminole Nation v. United States, 316 U.S. 286, 297 (1942). It has to be emphasized that none of the lease areas under study are on the Northern Cheyenne reservation.

A search has revealed only a few reported cases in which the trust responsibility has been successfully relied upon to require federal action off the reservation. An analysis of these cases indicates that there was always some other legal factor beyond simply the trust responsibility itself which required federal action. No such additional legal factor requires the inclusion of the lease stipulations of Appendix F. In Morton v. Mancari, 417 U.S. 535 (1974), the Supreme Court held that the antidiscrimination language in the 1964

Civil Rights Act did not repeal the Indian employment preference contained in the 1934 Indian Reorganization Act for jobs within the Bureau of Indian Affairs. In reaching this conclusion, the Court, of course, relied upon the Indian Reorganization Act as well as the government's fiduciary responsibility to the Indians. In Morton v. Ruiz, 415 U.S. 199 (1974), the Supreme Court held that general assistance benefit payments under the Snyder Act were available to Indians living near, but not on, a reservation despite BIA regulations to the contrary. The Court felt Congress had been given misleading testimony by the BIA concerning the availability of benefits. The Court relied on this possible misstatement, statutory interpretation of the Snyder Act itself, and procedural inadequacies in adopting the BIA policy at issue in addition to the fiduciary responsibility the government owed to the Indians in invalidating the regulations prohibiting the payments as arbitrary and capricious. Finally, in Pyramid Lake Paiute Tribe v. Morton, (D.D.C. 1972) 354 F.Supp. 252, a United States District Court held that the Secretary was required by existing court decrees, and his own regulations, and the fiduciary obligation, not to divert water unnecessarily from Pyramid Lake.

Thus, in these few instances where the trust responsibility of the federal government to the Tribes has extended to federal actions off the reservation, there has been some directly affected Indian property right (Pyramid Lake Paiute Tribe case) or a statutory obligation separate and apart from the trust responsibility (Mancari and Ruiz cases). The Northern Cheyenne Tribe's assertion that the federal trust responsibility requires federal action to impose these lease stipulations not otherwise required by statute on leases located off the reservation is analogous to the effort in the case of Donohue v. Butz to have a portion of a national park to which an Indian group had no property or treaty claim set apart to them. In that case, a U.S. District Court ruled that the trust responsibility did not extend so far as to create otherwise non-existent rights. (D.N.Cal. 1973) 363 F.Supp. 1316. The Court distinguished the Mancari, Ruiz, and Pyramid Lake cases stating:

> All of these cases have involved or at least referred to the trust responsibility doctrine in the context of particular, recognizable Indian rights . . . . In the pending case we find no

> comparable context of particular, recognizable rights of plaintiffs upon which to invoke the doctrine of trust responsibility.

363 F.Supp. at 1324.

In summary, contrary to the assertion of the Northern Cheyenne Tribe, there is no general legal requirement that the Secretary do more than consider mitigation measures. He need not fashion or adopt these.

Most advocates of a broad interpretation of the Secretary's section 30 "public welfare" authorities fail to discuss in any detail the relationship of this authority to the 50% redistribution of mineral lease revenues to the States under section 35 of the MLA, as amended, 30 U.S.C. 191 (1982). The legislative history of section 35, as amended by section 9 of FCLAA in August of 1976, and section 317(a) of FLPMA in October 1976, indicates that Congress expressly considered such distributions to be funds available to respond to community impacts caused by MLA authorized activities.

Section 35 originally provided that States would receive 37.5% of the mineral revenues received by the Federal Government within their jurisdictions, with Congress stating policy that the funds be used for school and road construction and maintenance. By section 9 of the FCLAA, this percentage was increased to 50% and the Congressionally intended uses of such distribution were expanded to include planning activities and construction of public facilities and provision of public services. Act of August 4, 1976, Pub. L. No. 94-337, 90 Stat. 1083, 1089-90, amending 30 U.S.C. Section 191 (1976).3/

The House of Reprentatives' report accompanying the revision of section 35 in the FCLAA explained the increase in the distribution percentage and

3/ Though section 35 of the MLA authorizes the above uses of funds it distributes to the States, the apportionment of such funds is left to the States and local governments. Whether they use such funds for congressionally intended purposes, neither Interior officials nor other political subdivisions or public or private entities have the right to compel the State legislatures to distribute such funds in any particular manner. See King County v. Seattle School District No. 1, 263 U.S. 361 (1923).

the expanded uses to which it could be applied, in H.R. Rep. No. 94-681, 94th Cong., 1st Sess. 19 (1975), as follows:

> The additional 12 1/2 percent that will go to the States is not earmarked for schools and roads, and may be spent by the States for planning public facilities and public services, giving priority to those communities impacted by the mineral development.

Section 317(a) of FLPMA, passed in October 1976, Pub L. 94-579, 90 Stat. 2770, further amended section 35 to provide that the redistributed funds were "to be used by such State and it subdivisions, as the legislature or the State may direct giving priority to those subdivisions of the State socially or economically impacted by development of minerals leased under this Act, for (i) planning, (ii) construction and maintenance of public facilities, and (iii) provision of public service. . . . " The Senate Report accompanying the bill which became FLPMA explained this provision, in S. Rep. No. 94-583, 94th Cong., 1st Sess. 63-64 (1975), as follows: 4/

> It now appears that many of the western public land States will experience substantial oil shale and coal development in the near future. If so, State and local governments will have to provide a wide range of community services to large numbers of new residents. Roads and schools are just two of those services. Water and sewer treatment plants, health and energy services, police and fire protection all must be considered, planned and funded. The Committee recognizes a need to alter section 35 [of the Mineral Leasing Act of 1920] to provide necessary flexibility to State and local governments to accommodate the inevitable, extraordinary economic, social and environmental effects which such "energy booms" will have. The Federal Government has the responsibility of assisting local people who must bear the often severly adverse, localized impacts of fuels development which benefits the public on a nationwide basis.

4/ In section 317(c) of FLPMA, Congress again dealt with the social and economic impacts of mineral development, providing the Secretary the authority to "make loans to States and their political subdivisions in order to relieve social or economic impact occasioned by the development of minerals leased in such States . . . ." Because section 317(c) has never been funded, however, it is uncertain how much weight to accord this language.

One interpretation of the Secretary's authority to impose socioeconomic mitigation stipulations is that through section 35's distribution of rents and royalties to the States as amended by section 9 of FCLAA and section 317(a) of FLPMA, Congress intended this section to be the only mechanism to mitigate socioeconomic impacts of Federal mineral lease development. Another interpretation of the Secretary's authority under section 35 is that the Congress did not intend it to be the only method available to the Secretary to mitigate adverse socioeconomic effects of Federal mineral lease development.

The best view, however, is that section 35 is the exclusive method by which the Secretary is authorized to pay, or require lessees to pay, money to the States to use for socioeconomic impact mitigation measures. Under this view, section 30 could not authorize a BLM lease stipulation obligating a lessee to pay, directly or indirectly, money to States, localities or other entities or individuals, other than that imposed by applicable State or local taxes, and not including any prepayment of taxes scheme that was not generally applicable to anyone conducting the same economic activity anywhere in that jurisdiction. Such a stipulation would be inconsistent with the purpose and operation of section 35.

Moreover, Congress has assented to State and local tax laws applying to Federal lessees in section 32 of the MLA, 30 U.S.C. section 189 (1982), and the Supreme Court has held that State taxes on Federal lessees' mineral development activities do not impermissibly conflict with the purpose of the MLA. Commonwealth Edison Co. v. Montana, 453 U.S. 609 (1981). Such taxes

"upon improvements, output of mines, or other rights, property, or assets of any lessee" (30 U.S.C. 189), of course, must apply in like manner to persons conducting the same mineral activity on private or State lands.

Because section 35 provides expressly for direct financial assistance to the States impacted by Federal mineral lease development and section 32 authorizes States and localities to tax mineral development of such leases, it is apparent Congress intended these sections to be the exclusive mechanisms authorizing direct financial assistance to mitigate off-lease socio-economic and other impacts caused by Federal mineral lease development.

Chapter XI

Bibliographical Material

This final chapter of the Reference Guide is composed of reference materials listed in a 1984 Westview Press (Boulder, Colorado) publication entitled Socioeconomic Impact Management: Design and Implementation authored by John Halstead, Robert Chase, Steve Murdock and Larry Leistritz. The book is a thorough and balanced work, designed to "(1) outline several conceptual frameworks for designing impact management programs, (2) identify situations which create a need for impact management, and (3) examine the key components of impact management systems, with attention to both conceptual bases for choosing among alternative approaches and practical considerations in implementing them" (p. xii).

Socioeconomic Impact Management covers an array of mitigation design topics. This Reference Guide centers on jurisdictional and authority issues. As such, they complement each other and should be useful in different ways to different potential users.

For users of the Reference Guide, Socioeconomic Impact Management may be valuable in operationalizing mitigation processes after basic jurisdictional issues are resolved. The section here included, References, should also be helpful in such endeavors, facilitating the acquisition of additional materials.

EXHIBIT 16

Socioeconomic Impact Management

Design and Implementation

John M. Halstead, Robert A. Chase,
Steve H. Murdock, and F. Larry Leistritz

Westview Press / Boulder and London

Contents

List of Tables and Figures ix
Preface xi
Acknowledgments xiv

1 INTRODUCTION TO SOCIOECONOMIC IMPACT MANAGEMENT 1

Rationale for an Evaluation of Socioeconomic Impact Management Methods 1
Specific Focus and Scope 11
Overview of Impact Management Approaches 14
Organization of the Text 17

2 THEORETICAL PERSPECTIVES FOR IMPACT MANAGEMENT 21

The Role of Theory in Impact Management 22
Theoretical Perspectives Applicable to Impact Management 24
The Application of Theoretical Perspectives to Impact Management 27
Conclusions 34

3 INITIATING IMPACT MANAGEMENT: WHERE TO BEGIN? 35

The Familiarization Phase 36
Preliminary Assessment of Socioeconomic Impacts 38
Impact Evaluation 45
Conclusions and Implications 48

4 PUBLIC PARTICIPATION AND NEGOTIATION IN FACILITY SITING . 49

Examples of Failure and Success in Public Participation . 51
Theoretical Approaches to Participation and Negotiation . 55
Conclusions and Implications 61

5 INSTITUTIONAL MECHANISMS IN IMPACT MANAGEMENT 63

State and Local Siting Legislation 64
State Financing of Energy Impact Management 68
Community-Developer Agreements 69
Conclusions and Implications 79

6 PROJECT MANAGEMENT MEASURES TO REDUCE INMIGRATION 83

Work Force Characteristics 84
Identification and Evaluation of Mitigation Alternatives 94
Conclusions and Implications 111

7 PLANNING FOR GROWTH: INCREASING COMMUNITY INFRASTRUCTURE CAPACITY 115
Organizing the Community 115
Meeting Housing Demand 118
Public Service Impacts 130
Conclusions and Implications 136

8 FINANCING DEVELOPMENT IN RAPID-GROWTH COMMUNITIES 139

Addressing Fiscal Realities in Public Facilities and Services Provision 140
Financing Private Sector Development 159
Conclusions 172

9 PLANNING FOR THE INEVITABLE? CLOSURE ISSUES IN RESOURCE DEVELOPMENT 177

The Extent of Facility Closure in Resource Communities . 179
Reasons Underlying Facility Closure and Cancellation . . 182
The Costs of Facility Closure 184
Mitigative Responses to Facility Closure 189
Conclusion 203

10 SUMMARY, CONCLUSIONS, AND FUTURE DIRECTIONS 207

Summary 207
Generalizations and Conclusions 209
Future Directions 211

References 217
Index 253

XI-4

References

Abrams, Nancy E., and Primack, Joel R. 1980. "Helping the Public Decide--The Case of Radioactive Waste Management." *Environment* 22:14-40.

Accola, John. 1983. "In Time of Boom, Government Going Bust." *USA Today* September 12.

AFL-CIO. 1982. *A Union Response to Plant Closings and Worker Displacement: A Program Guide.* Washington, D.C.: AFL-CIO, November.

Alberta Treasury. 1983. *Alberta Heritage Savings Trust Fund Annual Report 1982-83.* Edmonton, Alberta: Alberta Treasury.

Amok/Cluff Mining Ltd. 1981. *New Dimensions in Northern Participation.* Saskatoon, Saskatchewan.

Anderson, Robert, and Barkley, David L. 1982. "Rural Manufacturers' Characteristics and Probability of Plant Closings." *Growth and Change* 13(1): 2-8.

Armington, Catherine. 1983. *Further Examination of Sources of Recent Employment Growth Analysis of USEEM Data for 1976 to 1980.* Washington, D.C.: Brookings Institute.

Armington, Catherine, and Odle, Marjorie. 1982. *Sources of Employment Growth 1978-1980.* Washington, D.C.: Brookings Institute.

Arnstein, Sherry R. 1969. "A Ladder of Citizen Participation." *Journal of the American Institute of Planners* 35:216-24.

Aronson, Robert L., and McKersie, Robert B. 1980. *Economic Consequences of Plant Shutdowns in New York State.* Ithaca: New York State School of Industrial and Labor Relations, Cornell Univ., May.

Auger, C. S.; Allen, E.; Blaha, S.; Fahys, V.; Low, L.; Maurice, R.; Vestal, C.; and Walker, C. 1978. *Energy Resource Development, Socioeconomic Impacts, and the Current Role of Impact Assistance.* Boulder, Colo.: TOSCO Foundation.

Auger, C. S., and Zeller, M. 1979. *Siting Major Energy Facilities.* Boulder, Colo.: TOSCO Foundation.

Ayer, Harry W., and Layton, M. Ross. 1972. "Meeting the Economic Impact of Mine-Smelter Phase-Down in Bisbee-Douglas." *Arizona Review* 21(12): 1-5.

Bagshaw, Michael L., and Schnorbus, Robert H. 1980. "The Local Labor-Market Response to a Plant Shutdown." Federal Reserve Bank of Cleveland *Economic Review.* (January): 16-24.

Baker, Joe G. 1977. *Labor Allocation in Western Energy Development.* Human Resources Institute Monograph No. 5. Salt Lake City: Univ. of Utah.

Barbe, Nancy, and Daniels, Belden. 1982. "Resource-Rich States Break New Ground in Investing in Small Business." *The Entrepreneurial Economy* 1(2): 7-8.

Baril, R. G. 1981. "Community Impact Agreements and Monitoring." Presented at the Second International Forum on the Human Side of Energy, 16-19 August, at Edmonton, Alberta.

Barrows, Richard, and Charlier, Marj. 1982. "Local Government Options for Managing Rapid Growth." In *Coping with Rapid Growth in Rural Communities,* ed. Bruce A. Weber and Robert E. Howell. Boulder, Colo.: Westview Press.

Barth, Michael C. 1982. "Canada's Manpower Consultation Service: A Model for Adjustment Assistance?" *The Entrepreneurial Economy* 1(5): 12.

Bartholomew, Wayne; Joray, Paul; and Kochanowski, Paul. 1977. "Corporate Relocation Impact: South Bend." *Indiana Business Review* 52(1): 2-10.

Batey, Peter W. J., and Maden, Moss. 1983. "The Modeling of Demographic-Economic Change Within the Context of Regional Decline. Typescript. Liverpool, U.K.: Univ. of Liverpool, Dept. of Civic Design.

Batt, William, and Spring, William. 1982. *Plant Closings: What Can Be Learned from Best Practice.* Labor-Management Services Administration, U.S. Dept. of Labor. Washington, D.C.: GPO.

Bearse, Peter J., ed. 1982. *Mobilizing Capital: Program Innovation and the Changing Public/Private Interface in Development Finance.* New York: Elsevier Science Publishing Co.

Berger, Marguerite. 1983. "New State Approaches to Natural Resource-Based Development." *The Entrepreneurial Economy* 1(11): 10-12.

Berkey, E.; Carpenter, N. G.; Metz, William C.; Meyers, D. W.; Porter, D. R.; Singley, J. E.; and Travis, R. K. 1977. *Social Impact Assessment, Monitoring, and Management by the Electric Energy Industry: State of the Practice.* Washington, D.C.: Atomic Industrial Forum and Edison Electric Institute.

Berth, Michael C., and Reisner, Fritzie. 1983. *Worker Adjustment to Plant Shutdowns and Mass Layoffs.* Washington, D.C.: National Alliance of Business, March.

Betz, Marga R. 1980. "Community Stability in Resource Towns." Typescript. Calgary: Alberta Environment.

Birch, David. 1979. *The Job Generation Process.* Cambridge: MIT Program on Neighborhood and Regional Change.

Bisset, R. 1980. "Assessment of Social Impacts." Paper presented to WHO Seminar on Environmental Impact Assessment, 22 June-2 July, at Univ. of Aberdeen, Scotland.

Black, Robert E. 1983. "Public Participation in National Resource Management." In *Proceedings of the Alaska Symposium on the Social, Economic, and Cultural Effects of Natural Resource Development,* ed. Sally Yarie, pp. 124-30. Fairbanks: Univ. of Alaska.

Blalock, Hubert. 1969. *Theory Construction.* Englewood Cliffs, N.J.: Prentice-Hall.

Blasi, Joseph R., and Whyte, William Foote. 1982. "Worker Ownership and Pubic Policy." In *Public Policies for Distressed Communities,* ed. F. Stevens Redburn and Terry F. Buss. Lexington, Mass.: Lexington Books.

Bleiker, Hans. 1983. "How to Get Controversial Projects, Programs, and Plans Implemented." Presentation at the eleventh annual North Dakota State Planning Conference, 8-9 December, at Bismarck.

Bluestone, Barry, and Harrison, Bennett. 1980. *Capital and Communities: The Causes and Consequences of Private Disinvestment.* Washington, D.C.: The Progressive Alliance.

Bluestone, Barry, and Harrison, Bennett. 1982. *The Deindustrialization of America.* New York: Basic Books.

Blunck, Nancy L. 1983. "Public Participation on Complex Projects with a High Level of Conflict." In *Proceedings of the Alaska Symposium on the Social, Economic, and Cultural Effects of Natural Resource Development,* ed. Sally Yarie, pp. 131-34. Fairbanks: Univ. of Alaska.

Bowen, Richard L. 1983. "Economic and Fiscal Impacts of Decline." Typescript. Honolulu: Univ. of Hawaii, Dept. of Agr. Econ.

Bowen, Richard L., and Foster, David L. 1983. *A Profile of Displaced Pineapple Workers on Molokai.* Res. Ext. Series 031. Honolulu: Univ. of Hawaii, College of Tropical Agriculture and Human Resources, August.

Bradbury, J. H. 1979. "Towards an Alternative Theory of Resource-Based Town Development in Canada." *Economic Geography* 55:147-66.

Bradbury, Katharine L. 1982. "Fiscal Distress in Large American Cities." *New England Economic Review* (November/December): 33-44.

Bradbury, Katharine L. 1983. "Structural Fiscal Distress in Cities--Causes and Consequences." *New England Economic Review* (January/February): 32-43.

Bradley, Keith, and Gelb, Alan. 1983. *Worker Capitalism.* Cambridge: MIT Press.

Braid, Robert B., Jr. 1980. *Chronic Underprojections of Work Forces at Nuclear Power Plants.* Oak Ridge, Tenn.: Oak Ridge National Laboratory.

Braid, Robert B., Jr., and Kyles, Stephen D. 1977. *The Clinch River Breeder Reactor Plant: Suggested Procedures for Monitoring and Mitigating Adverse Construction-Period Impacts on Local Public Services.* Knoxville: East Tennessee Energy Projects Coordinating Committee.

Branch, Kristi M.; Hooper, Douglas A.; and Moore, James R. 1982. "Decision-Making Under Uncertainty." Paper presented at the Four Nations Energy Resource Communities Conference, 23-30 June, at Calgary and Edmonton, Alberta.

Brealey, T. B., and Newton, P. W. 1978. "Migration and New Towns." In *Mobility and Community Change in Australia,* ed. Ian H. Burnley, Robin J. Pryor, and Don T. Rowland. Brisbane, Australia: Queensland Univ. Press.

Brealey, T. B., and Newton, P. W. 1981. "Commuter Mining--An Alternative Way." In *Proceedings, Australian Mining Industry Council Environmental Workshop*. Canberra, Australia.

Brenner, M. Harvey. 1976. *Estimating the Social Costs of National Economic Policy*. A study prepared for the Joint Economic Committee, U.S. Congress. Washington, D.C.: GPO.

Briscoe, Maphis, Murray, and Lamont, Inc. 1978. *Action Handbook: Managing Growth in the Small Community*. A report for the U.S. Environmental Protection Agency. Washington, D.C.: GPO.

Bronder, Leonard D.; Carlisle, Nancy; and Savage, Michael D., Jr. 1977. *Financial Strategies for Alleviation of Socioeconomic Impacts in Seven Western States*. Prepared by Western Governors' Regional Energy Policy Office with Federal Energy Administration. Denver.

Brown, B. 1977. *The Impact of New Boomtowns*. Washington, D.C.: New Dimensions in Mental Health.

Browne, Bortz, and Coddington. 1981. *A Retrospective Analysis of the Jim Bridger Complex Socioeconomic Effects*. Denver: Browne, Bortz, and Coddington.

Browne, Bortz, and Coddington. 1982. *The 1981 Campbell County Socioeconomic Monitoring Report*. Denver: Browne, Bortz, and Coddington.

Brownrigg, Mark. 1980. "Industrial Contraction and the Regional Multiplier Effect: An Application in Scotland." *Town Planning Review* 51(2): 195-210.

Buckley, Walter. 1967. *Sociology and Modern Systems Theory*. Englewood Cliffs, N.J.: Prentice Hall.

Burchell, Robert W., and Listokin, David. 1978. *The Fiscal Impact Handbook*. New Brunswick, N. J.: Center for Urban Policy Research.

Burtco, Inc. n.d. Data on Various Mancamps. Seattle.

Business Week. 1980. "The Reindustrialization of America." Issue No. 2643(30 June): 55-142.

Business Week. 1983. The Fallout from "Whoops." Issue No. 2798(11 July): 80-88.

Buss, Terry F., and Redburn, F. Stevens. 1981. "How To Shut Down A Plant." *Industrial Management* 23(May-June): 4-9.

Buss, Terry F., and Redburn, F. Stevens. 1983. *Shutdown at Youngstown*. Albany: State Univ. of New York Press.

California Employment Development Department. 1983a. *Closed Businesses in California: February 1980 To April 1983*. Sacramento.

California Employment Development Department. 1983b. *Planning Guidebook for Communities Facing A Plant Closure or Mass Layoff*. Sacramento.

Carnes, S. A.; Copenhaver, E.; Reed, J.; Soderstrom, E.; Sorenson, J.; Peelle, Elizabeth; and Bjornstad, D. 1982. *Incentives and the Siting of Radioactive Waste Facilities*. Oak Ridge, Tenn.: Energy Division, Oak Ridge National Laboratories.

Carpenter, Richard A. 1981. "Balancing Economic and Environmental Objectives: The Question is Still, How?" *Environmental Impact Assessment Review* 2(2): 175-188.

Cavanagh, Charles R. 1980. "Impact Management for Project/Construction Managers." Socioeconomic Workshop II, Denver: Stone and Webster Engineering Company.

Cavanagh, Charles R., and Geiger, John P. 1982. "The Role of Impact Reduction Strategies in Construction Efficiency." Paper presented at the American Society of Civil Engineers 1982 National Spring Convention, 26-30 April, at Las Vegas.

CCREM. 1982. *Environmental Assessment in Canada*. Toronto, Ontario: Canadian Council of Resource and Environment Ministers.

Chalmers, James A. 1977. *Construction Worker Survey*. Denver: U.S. Bureau of Reclamation.

Chalmers, James A., and Anderson, E. J. 1977. *Economic-Demographic Assessment Manual*. Denver: U.S. Bureau of Reclamation.

Chalmers, James A.; Pijawka, D.; Branch, Kristi; Bergmann, P.; Flynn, Jim; and Flynn, Cynthia. 1982. *Socioeconomic Impacts of Nuclear Generating Stations*. U.S. Nuclear Regulatory Commission. NUREG/CR-2750. Washington, D.C.: GPO, July.

Chase, Robert A., and Leistritz, F. Larry. 1983. *Profile of North Dakota's Petroleum Work Force, 1981-82*. Agr. Econ. Rpt. No. 174. Fargo: North Dakota Agr. Exp. Sta.

Chase, Robert A.; Leistritz, F. Larry; and Halstead, John M. 1983. "Assessing the Economic and Fiscal Effects of Repository Development." In *Nuclear Waste: Socioeconomic Dimensions of Long-Term Storage*, ed. Steve H. Murdock, F. Larry Leistritz, and Rita R. Hamm. Boulder, Colo.: Westview Press.

Christenson, James A., and Robinson, Jerry W. 1980. *Community Development in America*. Ames: Iowa State Univ. Press.

Christofferson, Juline. 1983. "Experience of the State of Utah with the NWTS Program." In *Proceedings of Waste Management '83 Conference*, ed. Roy Post. Tucson, Ariz.

Clark, Redmond. 1983. Telephone interview by John M. Halstead. Assistant Director, Massachusetts Dept. of Environmental Management. Boston.

Clawson, Marion. 1980. "The Dying Community: The Natural Resource Base." In *The Dying Community*, ed. Art Gallaher, Jr. and Harland Padfield. Albuquerque: Univ. of New Mexico Press.

Cole, Janice Rae; Fargoni, Allison; and Ramage, Betty. 1983. "The Human Impacts of Large-Scale Development Projects: The Process and Legal Basis for Mitigation." In *Proceedings of the Alaska Symposium on the Social, Economic, and Cultural Impacts of Natural Resource Development*. Fairbanks: Univ. of Alaska.

Congressional Budget Office. 1982. *Dislocated Workers: Issues and Federal Options*. A CBO Study Background Paper. Washington, D.C.: GPO.

Conrad, Robert F., and Hool, R. Bryce. 1980. *Taxation of Mineral Resources*. Lexington, Mass.: Lexington Books.

Coon, R. C.; Mittleider, J. F.; and Leistritz, F. Larry. 1983. *Economic Analysis of the North Dakota Lignite Industry*. Agr. Econ. Misc. Rpt. No. 67. Fargo: North Dakota State Univ.

Copp, James H. 1982. "Rural Health and Rural Development." Keynote address at Sixth Annual Institute of the American Rural Health Association, 11-14 June, at Jeffersonville, Vt.

Cortese, Charles F. 1982. "The Impacts of Rapid Growth on Local Organizations and Community Services." In *Coping with Rapid Growth in Rural Communities*, ed. Bruce A. Weber and Robert E. Howell. Boulder, Colo.: Westview Press.

Cortese, Charles F., and Jones, Bernie J. 1977. "The Sociological Analysis of Boom Towns." *Western Sociological Review* 8:76-90.

Cortese, Charles F., and Jones, Bernie J. 1979. "The Sociological Analysis of Boomtowns." In *Boomtowns and Human Services*, ed. J. A. Davenport and J. Davenport. Laramie: Univ. of Wyoming.

Coser, Lewis A. 1956. *The Function of Social Conflict*. London: Free Press of Glencoe.

Council on Environmental Quality. 1973. "Preparation of Environmental Impact Statements: Guidelines." *Federal Register* 38 (147, August 1): 20550-20562.

Council on Environmental Quality. 1978. "National Environmental Policy Act." *Federal Register* 43 (230, November 29): 55978-56007.

Cummings, Ronald G., and Mehr, Arthur F. 1977. "Investments for Urban Infrastructure in Boom Towns." *Natural Resources Journal* 17(2): 223-40.

Cummings, Ronald G., and Schulze, William D. 1978. "Optimal Investment Strategy for Boom Towns. *American Economic Review* 68(3): 374-85.

Dahrendorf, Ralf. 1959. *Class and Class Conflict in Industrial Society*. Stanford, Calif.: Stanford Univ. Press.

Daicoff, Darwin W. 1973. "The Community Impact of Military Installations." In *The Economic Consequences of Reduced Military Spending*, ed. Bernard Udis. Lexington, Mass.: Lexington Books.

Dakota Country. 1983. "Montana Power Line Settlement Annouced." Vol. V, Issue X. Bismarck.

Daniels, Belden Hull. 1982. "Capital is Only Part of the Problem." In *Mobilizing Capital: Program Innovation and the Changing Public/Private Interface in Development Finance*, ed. Peter J. Bearse. New York: Elsevier Science Publishing Co.

Daniels, Belden Hull; Barbe, Nancy; and Lirtzman, Harry. 1981. "Small Business and State Economic Development." In *Expanding the Opportunity to Produce: Revitalizing the American Economy Through New Enterprise Development*, ed. Robert Friedman and William Schweke. Washington, D.C.: Corporation for Enterprise Development.

Daniels, Belden Hull, and Kieschnick, Michael. 1979. *Development Finance: A Primer for Policymakers*. Washington, D.C.: National Rural Center.

Davenport, J. A., and Davenport, J. 1979. "A Town and Gown Approach to Boomtown Problems." In *Boomtowns and Human Services*, ed. J. A. Davenport and J. Davenport. Laramie: Univ. of Wyoming.

Davenport, J. A., and Davenport, J. 1980. "Boom Towns and the Aged." In *Energy and Aging: A Symposium*, pp. 28-38. Laramie, Wyo.: Western Gerontological Society.

Deaton, Brady J. 1975. "Community Development Corporations." *Growth and Change* 6(1): 31-37.

Delli Priscoli, Jerry. 1979. "Implementing Public Involvement Programs in Federal Agencies." In *Citizen Participation in America*, ed. Stuart Landon. Lexington, Mass.: Lexington Books.

Denver Research Institute. 1979. *Socioeconomic Impact of Western Energy Resource Development*. Washington, D.C.: Council on Environmental Quality.

DePape, Denis. 1981. Personal communication with F. Larry Leistritz. Winnipeg, Manitoba: Intergroup Consulting Economists, Ltd.

DePape, Denis. 1982. "Government/Industry Agreements for Resource Development." Paper presented at CIM Annual General Meeting, 27 April, at Quebec City, Quebec.

DePape, Denis. 1983. "Alternatives to Single Project Mining Communities." Paper presented at Centre For Resource Studies Discussion Seminar *Mining Communities: Hard Lessons For the Future*, 27-29 September, at Kingston, Ontario.

Department of Regional and Economic Expansion. 1979. *Single Sector Communities*. Ottawa, Ontario: Dept. of Regional and Economic Expansion.

Detomasi, Don D. 1982a. "The Delivery and Financing of Housing." Paper presented at the Conference on Energy Resource Communities: Socioeconomic Impacts and Community Development Problems in Four Nations, June, at Calgary, Alberta.

Detomasi, Don D. 1982b. "Public Sector Fiscal Impacts." In *Energy Resource Communities*, ed. Gene F. Summers and Arne Selvik. Madison, Wisc.: MJM Publishing Co. for the Inst. of Industrial Economics, Bergen, Norway.

DeVeney, G. R. 1977. *Construction Employee Monitoring*. Knoxville: TVA.

Didur, Jan. 1983. Telephone interview by John M. Halstead. Alberta Environment. Edmonton, Alberta.

DiNoto, Michael, and Merk, Larry. 1982. "The Economic Status of Shoshone County, Idaho. Typescript. Moscow: Univ. of Idaho, Center for Business Development and Research, Dept. of Econ.

Dixon, Mim. 1978. *What Happened to Fairbanks? The Effects of the Trans-Alaska Oil Pipeline on the Community of Fairbanks, Alaska*. Boulder, Colo.: Westview Press.

Doricht, Terrell. 1982. Telephone interview by John M. Halstead. Challis, Idaho superintendent of schools.

Ducsik, Dennis. 1981. "Citizen Participation: Alladin's Lamp or Pandora's Box?" *Journal of the American Planning Association* April:154-66.

Ducsik, Dennis. 1982. Referenced in O'Hare et al., 1983.

Ducsik, Dennis. 1984. "Power Plants and People: A Profile of Electric Utility Initiatives in Cooperative Planning." *Journal of the American Planning Association*. Spring:161-74.

Duncan, Otis D. 1964. "Social Organization and the Ecosystem." In *Handbook of Modern Society*, ed. Robert Faris, pp. 36-82. Chicago: Rand McNally and Co.

Dunning, C. Mark. 1981. *Report of Survey of Corps of Engineers Construction Work Force*. Research Rpt. 81-R05. Fort Belvoir, Va.: U.S. Army Corps of Engineers, Inst. for Water Resources.

ECOS Management Criteria, Inc. 1982. *The Validation and Improvement of Socioeconomic Forecasting Methodologies*. Washington, D.C.: U.S. Geological Survey.

Ellis, Carl. 1982. "Managing Boom Growth in Wyoming--Yesterday and Today." Paper presented at the American Society of Civil Engineers 1982 National Spring Convention, 26-30 April, at Las Vegas.

Ellis, Carl. 1983. Telephone interview by John M. Halstead. Wyoming Industrial Siting Administration. Cheyenne.

Energy Information Administration, U.S. Department of Energy. 1983. *Nuclear Plant Cancellations*. DOE/EIA-0392. Washington, D.C.: GPO.

Faas, Ronald C. 1980. *Mitigation of Local Community Fiscal Impacts Related to Nuclear Waste Repository Siting*. Corvallis, Oreg.: Western Rural Development Center.

Faas, Ronald C. 1982. *Evaluation of Impact Mitigation Strategies.* Corvallis, Oreg.: Western Rural Development Center.

Federal Energy Administration. 1974. *Project Independence Blueprint, Final Task Force Report: Synthetic Fuels from Coal.* Washington, D.C.: GPO.

Federal Energy Administration. 1976. *Federal Assistance Programs and Energy Development Impacted Communities.* Washington, D.C.: Wendell Associates.

Fedrau, Ruth. 1982. "A Comprehensive State Response to Plant Closings and Mass Layoffs." *The Entrepreneurial Economy* 1(5): 7-9.

Finsterbusch, Kurt. 1982. "Boomtown Disruption Thesis." *Pacific Sociological Review* 25(3): 307-22.

Finsterbusch, Kurt; Llewellyn, Lynn G.; and Wolf, C. P., eds. 1983. *Social Impact Assessment Methods.* Beverly Hills: Sage Publications.

Finsterbusch, Kurt, and Wolf, C. P., eds. 1981. *Methodology of Social Impact Assessment.* 2d ed. Stroudsburg, Pa.: Dowden, Hutchinson, and Ross.

Fisher, Peter S. 1983. "The Role of the Public Sector in Local Development Finance." *Journal of Economic Issues* 17(1): 133-53.

Fitzsimmons, S. J.; Stuart, L. I.; and Wolf, C. P., eds. 1977. *Social Assessment Manual: A Guide to the Preparation of the Social Well-Being Account for Planning Water Resource Projects.* Boulder, Colo.: Westview Press.

Foltman, Felician F. 1982. "Managing and Adjusting To A Plant Closing." In *Public Policies for Distressed Communities,* ed. F. Stevens Redburn and Terry F. Buss. Lexington, Mass.: Lexington Books.

Fookes, T. W. 1981a. *Answers to People's Questions.* Final Rpt. No. 1. Huntly Monitoring Project. Hamilton, New Zealand: Univ. of Waikato.

Fookes, T. W. 1981b. *Expectations and Related Findings, 1973-81.* Hamilton, New Zealand: Univ. of Waikato.

Fookes, T. W. 1981c. *Huntly Power Project: A Description.* Final Rpt. No. 2. Huntly Monitoring Project. Hamilton, New Zealand: Univ. of Waikato.

Fookes, T. W. 1981d. *Public Participation Initiatives.* Hamilton, New Zealand: Univ. of Waikato.

Fosler, R. Scott, and Berger, Renee A., eds. 1982. *Public-Private Partnerships in American Cities.* Lexington, Mass.: Lexington Books.

Francaviglia, Richard V. 1983. "Bisbee, Arizona: A Mining Town Survives A Decade of Closure." *Small Town* 13(1): 4-8.

Freudenburg, W. R. 1982. "The Impacts of Rapid Growth on the Social and Personal Well-Being of Local Community Residents." In *Coping with Growth in Rural Communities,* ed. Bruce A. Weber and Robert E. Howell. Boulder, Colo.: Westview Press.

Freudenburg, W. R., and Olsen, D. 1983. "Public Interest and Political Abuse: Public Participation in Social Impact Assessment." *Journal of the Community Development Society* 14(2): 67-82.

Frovarp, S. 1984. Telephone interview with John M. Halstead. Hazen, N. Dak City Planner.

Fuchs, Richard P. 1982. "Rural Residents in the Exploration Phase of Newfoundland's Offshore Oil Industry, 1981." Paper presented at Second International Conference on Oil and the Environment, 16-19 August, at Halifax, Nova Scotia.

Garfield County, Colorado. 1983. County ordinances. Glenwood Springs, Colo.

Gartrell, John W.; Krahn, H.; and Sunahara, F. D. 1980. *A Study of Human Adjustment in Fort McMurray.* Report prepared for Alberta Oil Sands Environmental Research Program. Edmonton, Alberta: Thames Research Group, Inc.

General Electric Company. 1975. *Assessment of Energy Parks Versus Dispersed Electric Power Generating Facilities, Final Report.* Washington, D.C.: General Electric Co., Center for Energy Systems.

George, Critz. 1983. "Federal/State Relations in the NWTS Program." In *Proceedings of Waste Management '83 Conference,* ed. Roy Post. Tucson, Ariz.

Gibbs, Jack, and Martin, Walter. 1959. "Toward A Theoretical System of Human Ecology." *Pacific Sociological Review* 2:29-36.

Gilmore, John S. 1976. "Boom Towns May Hinder Energy Resource Development." *Science* 191:535-540.

Gilmore, John S. 1980. "Socioeconomic Impact Management: Are Impact Assessments Good Enough to Help?" Paper presented at Conf. on Computer Models and Forecasting Impacts of Growth and Development, 20-23 April, at Univ. of Alberta, Jasper Park Lodge.

Gilmore, John S. 1983. "Observations and Comments on the Roles of Federal, State, and Local Governments in Socioeconomic Impact Mitigation." In *Proceedings of the Alaska Symposium on the Social, Economic, and Cultural Impacts of Natural Resource Development*. Fairbanks: Univ. of Alaska.

Gilmore, John S., and Duff, M. K. 1975a. *Boom Town Growth Management: A Case Study of Rock Springs--Green River, Wyoming*. Boulder, Colo.: Westview Press.

Gilmore, John S., and Duff, M. K. 1975b. *The Sweetwater County Boom: A Challenge to Growth Management*. Denver: Denver Research Inst.

Gilmore, John S.; Flory, D. K.; Hammond, D. M.; Moore, Keith D.; and Coddington, D. C. 1977. *Socioeconomic Impact Mitigation Mechanisms in Six States*. Denver: Denver Research Institute.

Gilmore, John S.; Giltner, R. E.; Coddington, D. C.; and Duff, M. K. 1975. *Factors Affecting an Area's Ability to Absorb a Large-Scale Commercial Coal-Processing Complex*. Washington, D. C.: Energy Research and Development Administration.

Gilmore, John S.; Hammond, D. M.; Moore, Keith D.; Johnson, J.; and Coddington, D. C. 1982. *Socioeconomic Impacts of Power Plants*. Report prepared for Electric Power Research Institute. Denver: Denver Research Institute.

Gilmore, John S.; Moore, Keith D.; Hammond, D. M.; and Coddington, D. C. 1976. *Analysis of Financing Problems of Coal and Oil Shale Boom Towns*. Washington, D.C.: Federal Energy Administration.

Gold, R. 1981. *Industrial and Community Responses To A Plant Closing in Anaconda, Montana*. Missoula, Mont.: Social Research and Applications.

Gordon, John, and Mulkey, David. 1978. "Income Multipliers for Community Impact Analysis--What Size is Reasonable?" *Journal of Community Development Society* 9(2): 85-93.

Gordus, Jeanne Prial; Jarley, Paul; and Ferman, Louis A. 1981. *Plant Closings and Economic Dislocation*. Kalamazoo, Mich.: W. E. Upjohn Inst. for Employment Research.

Grayson, J. Paul. 1983. "The Effects of A Plant Closure on the Stress Levels and Health of Workers' Wives." *Journal of Business Ethics* 2(3): 221-25.

Greene, Marjorie, and Curry, Martha G. 1977. *The Management of Social and Economic Impacts Associated With the Construction of Large-Scale Projects*. Richland: Battelle Human Affairs Research Centers, Pacific Northwest Laboratories.

Gulley, David A. 1982. "Severance Taxes and Market Failure." *Natural Resources Journal* 22(3): 597-617.

Gulliford, Andrew. 1983. "From Boom to Bust: Small Towns and Energy Development on Colorado's Western Slope." *Small Town* 13(5): 15-22.

Habitat North, Inc. 1979. *Socioeconomic Impacts of Selected Foreign OCS Developments*. Tech. Rpt. No. 28, Alaska OCS Socioeconomic Studies Program. Anchorage: Bureau of Land Management, Alaska Outer Continental Shelf Office.

Hadden, Susan; Chiles, James; Anaejionu, Paul; and Cerny, Karl. 1981. *High Level Nuclear Waste Disposal*. Austin: Texas Energy and Natural Resources Advisory Council.

Halstead, John M.; Chase, Robert A.; and Leistritz, F. Larry. 1983. "Mitigating Impacts of Plant Closures." Paper presented at American Agricultural Economics Assoc. Annual Meeting, 1-3 August, at Purdue Univ., West Lafayette, Ind.

Halstead, John M., and Leistritz, F. Larry. 1983a. *Impacts of Energy Development on Mercer County, North Dakota*. Agr. Econ. Rpt. No. 170. Fargo: North Dakota Agr. Exp. Sta.

Halstead, John M., and Leistritz, F. Larry. 1983b. *Impacts of Energy Development on Secondary Labor Markets*. Agr. Econ. Rpt. No. 178. Fargo: North Dakota Agr. Exp. Sta.

Halstead, John M.; Leistritz, F. Larry; and Chase, Robert A. 1983. *Socioeconomic Impact Management For High-Level Nuclear Waste Repositories*. Fargo: North Dakota Agr. Exp. Sta.

Halstead, John M.; Leistritz, F. Larry; Rice, D. G.; Saxowsky, D. M.; and Chase, Robert A. 1982. *Mitigating Socioeconomic Impacts of Nuclear Waste Repository Siting*. Fargo: North Dakota Agr. Exp. Sta.

Halstead, Robert. 1982. Personal interview by John M. Halstead. Madison: Wisconsin State Energy Office.

Hannah, Richard, and Mosier, R. Kim. 1977. *An Examination of Occupational Bottlenecks in the Construction, Fueling, and Operation of Coal-Fired Power Plants.* Salt Lake City: Univ. of Utah, Human Resources Institute.

Hansen, Gary B., and Bentley, Marion T. 1981. *Problems and Solutions in A Plant Shutdown.* Logan: Utah Center for Productivity and Quality of Working Life, Utah State Univ., November.

Hansen, Gary B.; Bentley, Marion T.; and Davidson, Richard A. 1980. *Hardrock Miners in A Shutdown.* Monograph No. 1. Logan: Center for Productivity and Quality of Working Life, Utah State Univ., May.

Hansen, Gary B.; Bentley, Marion T.; Gould, Jeanni H.; and Skidmore, Mark H. 1981. *Life After Layoff.* Logan: Utah Center for Productivity and Quality of Working Life, Utah State Univ.

Hargreaves, A. W. 1982. "Future of Coal Industry." Paper presented at the Singleton Coal Day, 29 October, at Singleton, New South Wales, Australia.

Harnisch, A. A. 1978. *Chief Joseph Dam: Community Impact Report, Update III.* Fort Belvoir, Va.: U.S. Army Corps of Engineers, Inst. for Water Resources.

Harrison, Bennett, and Bluestone, Barry. 1982. "The Incidence and Regulation of Plant Closings." In *Public Policies for Distressed Communities,* ed. F. Stevens Redburn and Terry F. Buss. Lexington, Mass.: Lexington Books.

Harvey, Edward F. 1982. Personal communication with F. Larry Leistritz. Denver: Browne, Bortz, and Coddington.

Hassinger, Edward J. 1982. *Rural Health Organization.* Ames: Iowa State Univ. Press.

Hawley, Amos H. 1950. *Human Ecology: A Theory of Community Structure.* New York: Ronald Press.

Hayden, F. Gregory, and Swanson, Larry D. 1980. "Planning Through the Socialization of Property Rights: The Community Reinvestment Act." *Journal of Economic Issues* 14(2): 351-69.

Haynes, T. L. 1983. "The Socioeconomic Impacts of Resource Development on the Elderly." In *Proceedings of the Alaska Symposium on the Social, Economic, and Cultural Impacts of Energy Development.* Fairbanks: Univ. of Alaska.

Hekman, John S., and Strong, John S. 1980. "Is There A Case for Plant-Closing Laws?" *New England Economic Review* (July/August): 34-51.

Henry, Mark S. 1980. "On the Value of Economic-Demographic Forecasts to Local Government. *Annals of Regional Science* 14(1): 12-20.

Hertsgaard, T. A., and Leistritz, F. Larry. 1983. "Adjusting to the Socioeconomic Impacts of Energy Development in North Dakota." In *Proceedings of the Alaska Symposium on the Social, Economic, and Cultural Impacts of Natural Resource Development.* Fairbanks: Univ. of Alaska.

Hodge, Ian. 1984. *Employment Adjustments and the Economic Costs of Decline in a Small Rural Community.* Bul. No. 629. Moscow: Idaho Agr. Exp. Sta.

Holmes and Narver, Inc. 1981. *Life Support Facility Planning and Evaluation Concept Study for Construction and Deployment Personnel, M-X Weapons System.* San Francisco: U.S. Army Corps of Engineers.

Homans, George C. 1950. *The Human Group.* New York: Harcourt, Brace, and World.

Hooper, J. E., and Branch, Kristi M. 1983. *Big Horn and Decker Mine Worker Survey Report.* Billings, Mont.: Mountain West Research-North, Inc.

Housing Services, Inc. 1981. *Wright, Wyoming: A Planned Community Development.* Final Environmental Impact Statement. Denver.

Houstoun, Lawrence O., Jr. 1977. "Here's What Should be Done About the Energy Boom Towns." *Planning* 43(3): 18-20.

Howell, Robert E.; Olsen, M. E.; Olsen, D.; and Yuan, G. 1983. "Citizen Participation in Nuclear Waste Repository Siting." In *Nuclear Waste: Socioeconomic Dimensions of Long-Term Storage,* ed. Steve H. Murdock, F. Larry Leistritz, and Rita R. Hamm. Boulder, Colo.: Westview Press.

Huesflon, Lee. 1981. Personal communication with F. Larry Leistritz. Underwood, N. Dak.: Cooperative Power Assoc.

Hushak, LeRoy J., and Morse, George, eds. 1979. *Proceedings of the Ex Ante Growth Impact Models Conference.* Ames, Iowa: North Central Regional Center for Rural Development.

Hyman, Eric. 1982. "Wyoming's Industrial Siting Permit Process and Environmental Impact Assessment." *Environmental Management* 6(1): 1-7.

Ide, Peter, and Siegel, Beth. 1983. "Financing Agricultural Development." *The Entrepreneurial Economy* 1(12): 6-7.

IPMP. 1983. *The Consent-Builders' Bulletin.* Vol. 1, No. 2. Laramie, Wyo.: Inst. for Participatory Management and Planning.

Isard, Walter. 1960. *Methods of Regional Analysis.* Cambridge: MIT Press.

James Bay-Northern Quebec Agreements. 1976. Agreement between Government of Quebec, James Bay Energy Society, James Bay Development Corporation, Hydro-Quebec, Grand Council of the Crees, and the Northern Quebec Inuit Association.

Jamison, David. 1982. "The Emerging Public-Private Partnership." In *Mobilizing Capital: Program Innovation and the Changing Public/Private Interface in Development Finance,* ed. Peter J. Bearse. New York: Elsevier Science Publishing Co.

Johannesson, Cary L., and Plesuk, Brian W. 1982. "Operationalizing Socio-Economic Planning: 'Talk's Cheap--Whiskey Costs Money'." Paper presented at the Second International Conference on Oil and The Environment, 15-19 August, at Halifax, Nova Scotia.

Jones, Derek C., and Svejnar, Jan (eds.). 1982. *Participatory and Self-Managed Firms.* Lexington, Mass.: Lexington Books.

Jones, L. L., and Murdock, Steve H. 1978. "The Incremental Nature of Public Service Delivery." *American Journal of Agricultural Economics* 60(5): 955-60.

Kaldor, Nicholas. 1981. "The Energy Issues." In *Oil or Industry? Energy, Industrialization and Economic Policy in Canada, Mexico, the Netherlands, Norway and the United Kingdom,* ed. Terry Barker and Vladimir Brailovsky. London: Academic Press.

Kennedy, D. A. 1979. "Health Care in Boomtowns." In *Boomtowns and Human Services,* ed. J. A. Davenport and J. Davenport. Laramie: Univ. of Wyoming.

Kennedy, William V. 1980. "Environmental Impact Assessment in the Federal Republic of Germany." *Environmental Impact Assessment Review* 1(1): 92-94.

Keyes, Robert J.; Tunis, Edward; Reeves, J. E.; Hutchinson, R. D.; Lemieux, Andre; Porter, Nancy; and Kennedy, Mark. 1982. *Report of the Task Force on Mining Communities.* Ottawa, Ontario: Canada Energy, Mines, and Resources, September.

Knight, R. 1975. *Work Camps and Company Towns in Canada and the U.S.* Vancouver, British Columbia: Newstar Books.

Krawetz, N. M. 1981. *Overseas Energy Projects and Huntly.* Hamilton, New Zealand: Univ. of Waikato.

Krutilla, John V., and Fisher, Anthony C. 1978. *Economic and Fiscal Impacts of Coal Development: Northern Great Plains.* Baltimore, Md.: Johns Hopkins Univ. Press for Resources for the Future.

Labor Union Study Tour Participants. 1979. *Economic Dislocation: Plant Closings, Plant Relocations, and Plant Conversion.* Washington, D.C.: United Automobile Workers, United Steel Workers of America, and the International Association of Machinists.

Lamont, William; Beardsley, George; Briscoe, Andy; Carver, John; Harrington, Dan; Lansdowne, John; and Murray, James. 1974. *Tax Lead Time Study for the Oil Shale Region.* Denver: Colorado Geological Survey.

Lamphear, Charles F., and Emerson, M. Jarvin. 1975. *Urban and Regional Economics: Structure and Change.* Rockleigh, N.J.: Allyn and Bacon, Inc.

Langerman, Philip D.; Byerly, Richard L.; and Root, Kenneth A. 1982. *Plant Closings and Layoffs.* Des Moines, Iowa: Drake Univ., College for Continuing Education, November.

Lee, N., and Wood, C. 1978. "Environmental Impact Assessment of Projects in EEC Countries." *Journal of Environmental Management* 6(1): 57-71.

Leholm, A. G.; Leistritz, F. Larry; and Wieland, James S. 1976. *Profile of North Dakota's Electric Power Plant Construction Work Force.* Agr. Econ. Stat. Series No. 22. Fargo: North Dakota Agr. Exp. Sta.

Leifer, Nancy. 1982. "Investing the Energy Windfall in Resource-Rich States: The Montana Coal Tax Trust-Fund." In *Mobilizing Capital: Program Innovation and the Changing Public/Private Interface in Development Finance,* ed. Peter J. Bearse. New York: Elsevier Science Publishing Co.

Leistritz, F. Larry, and Chase, Robert A. 1982. "Socioeconomic Impact Monitoring Systems." *Journal of Environmental Management* 15:333-49.

Leistritz, F. Larry; Halstead, John M.; Chase, Robert A.; and Murdock, Steve H. 1982. "Socioeconomic Impact Management." *Minerals and the Environment* 4:141-50.

Leistritz, F. Larry, and Maki, Karen C. 1981. *Socioeconomic Effects of Large-Scale Resource Development Projects in Rural Areas: The Case of McLean County, North Dakota.* Agr. Econ. Rpt. No. 151. Fargo: North Dakota Agr. Exp. Sta.

Leistritz, F. Larry, and Murdock, Steve H. 1981. *Socioeconomic Impact of Resource Development: Methods for Assessment.* Boulder, Colo.: Westview Press.

Leistritz, F. Larry; Murdock, Steve H.; and Leholm, A. G. 1982. "Local Economic Changes Associated with Rapid Growth." In *Coping With Rapid Growth in Rural Communities*, ed. Bruce A. Weber and Robert Howell, pp. 25-62. Boulder, Colo.: Westview Press.

Leistritz, F. Larry; Toman, Norman E.; Murdock, Steve H.; and deMontel, John. 1981. "Cash-Flow Analysis for Energy Impacted Local Governments: A Case Study of Mercer County, North Dakota." *Socio-Economic Planning Sciences* 15(2): 165-74.

Lonsdale, R. E., and Seyler, H. L. 1979. *Nonmetropolitan Industrialization.* New York: John Wiley and Sons.

Lovejoy, Stephen B. 1983. "Employment Predictions in Social Impact Assessment." *Socio-Economic Planning Sciences* 17(2): 87-93.

Lovejoy, Stephen B.; Brown, D. J.; and Weitz, J. S. 1983. "Inmigrants in Nonmetropolitan Communities." *North Central Journal of Agricultural Economics* 5(2): 39-46.

Lovejoy, Stephen B.; Marotz-Baden, Ramona; and Baden, John. 1982. *Contracting for Public Service Delivery: An Alternative for Boom Towns.* WRDC Pub. No. 14. Corvallis, Oreg.: Western Rural Development Center.

Ludwig, Roger. 1983. Personal interview by John M. Halstead. Director, Garfield County Human Services Planning Dept. Glenwood Springs, Colo.

Luke, Ronald T. 1980. "Managing Community Acceptance of Major Industrial Projects." *Coastal Zone Management Journal* 7:271-96.

Lynch, John E. 1970. *Local Economic Development After Military Base Closures.* New York: Praeger Publishers.

MacDonnell, Lawrence; Moore, Keith D.; Lawson, Mark; Daniels, Belden; Klein, Steven; Posner, Bruce; and Browne, Ted. 1982. *Facilitating Private Sector Capital Availability in Rapid Growth Communities.* Denver: Denver Research Inst.

McGinnis, Karen, and Schua, Dean. 1983. "The Downside of Nuclear Plant Construction." Paper presented at Northwest Regional Economics Conference, 5-7 May, at Bellingham, Wash.

McHugh, H. H. 1982. "Reaching Out to Make A Town A Home." *Shale Country* April/May:6-8.

McKenzie, Richard B., ed. 1982. *Plant Closings: Public or Private Choices?* Washington, D.C.: Cato Institute.

McKersie, Robert B., and Sengenberger, Werner. 1983. *Job Losses in Major Industries: Manpower Strategy Responses.* Paris, France: Organization for Economic Cooperation and Development.

Malhotra, Suresh, and Manninen, Diane. 1980. *Migration and Residential Location of Workers at Nuclear Power Plant Construction Sites.* Vol. 1, *Forecasting Methodology* and Vol. 2, *Profile Analysis of Worker Surveys.* Seattle: Battelle Human Affairs Research Centers.

Markusen, Ann Roell. 1977. "Federal Budget Simplification: Preventative Programs Vs. Palliatives for Local Governments with Booming, Stable, and Declining Populations." *National Tax Journal* 30(3): 249-58.

Marshall, David W. I., and Scott, Paul F. 1982. "Environmental and Social Impact Assessment of the Beaufort Sea Hydrocarbon Production Proposal." Paper presented at the First International Conference on Social Impact Assessment, 25 October, at Vancouver, British Columbia.

Martin, Julie E. 1983. *New Resource-Based Developments in the North of Scotland.* Aberdeen, Scotland: Univ. of Aberdeen, Dept. of Geography.

Massachusetts. 1980. Massachusetts Hazardous Waste Facility Siting Act. Chapter 21D, Acts of 1980.

Mather, Tom. 1983. Telephone interview by John M. Halstead. Manager, Cypress Creek Camp. Holleran Services, Inc., Challis, Idaho.

Mazza, Jacqueline; Mayer, Virginia; Chione, Mary; Cutler, Leslie; Hauser, Timothy; and Spear, Amy. 1982. *Shutdown: A Guide for Communities Facing Plant Closings.* Washington, D.C.: Northeast-Midwest Institute.

Merton, Robert K. 1968. *Social Theory and Social Structure.* New York: Free Press.

Metz, William C. 1979a. *Socioeconomic Impact Management in the Western Energy Industry.* BNL-25545. Upton, N.Y.: Brookhaven National Laboratory.

Metz, William C. 1979b. *Worker-Vehicle Ratios at Major Eastern Power Plant Construction Sites.* BNL-27338. Upton, N.Y.: Brookhaven National Laboratory.

Metz, William C. 1980. "The Mitigation of Socioeconomic Impacts by Electric Utilities." *Public Utilities Fortnightly* 106(1): 34-42.

Metz, William C. 1981. *Construction Work Force Management: Worker Transportation and Temporary Housing Techniques.* Report prepared for Western Rural Development Center. Corvallis, Oreg.

Metz, William C. 1982a. "American Energy and Mineral Industry Involvement in Housing." *Minerals and the Environment* 4:131-40.

Metz, William C. 1982b. "Energy Industry Involvement in Worker Transportation." *Transportation Quarterly* 36(4): 563-84.

Metz, William C. 1983. "Industry Initiatives in Impact Mitigation." In *Proceedings of the Alaska Symposium on the Social, Economic, and Cultural Impacts of Natural Resources Development.* Fairbanks: Univ. of Alaska.

Michels, R. E. 1980. *The Atikokan Story.* Thunder Bay, Ontario: Municipal Advisory Committee.

Miller, Jack R. 1984. "Steel Minimills." *Scientific American* 250(5): 32-39.

Miller, James. 1983. Telephone interview by John M. Halstead. Director, Minnesota Public Interest Research Group (MPIRG). Minneapolis.

Miller, Michael K. 1982. "Health and Medical Care." In *Rural Society in the United States,* ed. Don A. Dillman and Daryl J. Hobbs. Boulder, Colo.: Westview Press.

Mills, C. Wright. 1948. *The Marxists.* New York: Harcourt, Brace, and World.

Moen, E.; Boulding, E.; Lilydahl, J.; and Palm, R. 1981. *Women and the Social Costs of Economic Development.* Boulder, Colo.: Westview Press.

Moore, James R.; Tomasik, Jack; Amacher, Ryan; and Whitworth, Regan. 1979. *Mineral Fuels Taxation in the Old West Region.* Prepared for the Univ. of Montana. Billings, Mont.: Mountain West Research, Inc.

Moore, Keith D. 1979. *Stimulating Energy-Related Growth.* Denver: Denver Research Institute.

Moore, R. 1982. *The Social Impact of Oil: The Case of Peterhead.* London: Routledge and Kegan Paul.

Morell, David, and Magorian, Christopher. 1982. *Siting Hazardous Waste Facilities.* Cambridge, Mass.: Ballinger Press.

Morse, George W. 1983. "Local Fiscal Impacts of Plant Closings." Paper presented at the annual meeting of the American Agricultural Economics Association, 1-3 August, at West Lafayette, Ind.

Morse, George W., and McDowell, George. 1982. "Estimating the Impacts of Growth on Local Governments." In *How Extension Can Help Communities Conduct Impact Analyses,* ed. Ron E. Shaffer. Bul. No. 1-04-82-IM-E. Madison: Univ. of Wisconsin Extension.

Mountain West Research, Inc. 1975. *Construction Worker Profile.* Washington, D.C.: Old West Regional Commission.

Mountain West Research, Inc. 1979. *Pipeline Construction Worker and Community Impact Surveys.* Billings, Mont.: Mountain West Research, Inc.

Muller, Thomas, and Soble, Carol E. 1982. *Financing Rapid Growth.* Community Guidance Manual VIII. Office of Economic Adjustment. Washington, D.C.: U.S. Dept. of Defense.

Murdock, Steve H. 1979. "The Potential Role of the Ecological Framework in Impact Analysis." *Rural Sociology* 44:543-65.

Murdock, Steve H.; Hopkins, P.; de Montel, J.; Hamm, Rita R.; Brown, T.; Bauer, M.; and Bullock, R. 1981. *Employment, Population, and Community Service Impacts of Uranium Development in South Texas.* College Station: Texas Agr. Exp. Sta.

Murdock, Steve H., and Leistritz, F. Larry. 1979. *Energy Development in the Western United States.* New York: Praeger Publishers.

Murdock, Steve H., and Leistritz, F. Larry. 1982. "Commentary." *Pacific Sociological Review* 25(3): 357-66.

Murdock, Steve H.; Leistritz, F. Larry; and Hamm, Rita R., eds. 1983. *Nuclear Waste: Socioeconomic Dimensions of Long-Term Storage*. Boulder, Colo.: Westview Press.

Murdock, Steve H.; Leistritz, F. Larry; and Schriner, Eldon C. 1982. "Local Demographic Changes Associated with Rapid Growth." In *Coping With Rapid Growth*, ed. Bruce A. Weber and Robert E. Howell, pp. 63-96. Boulder, Colo.: Westview Press.

Murdock, Steve H.; Wieland, James S.; and Leistritz, F. Larry. 1978. "An Assessment of the Validity of the Gravity Model for Predicting Community Settlement Patterns in Rural Energy Impact Areas in the West." *Land Economics* 54(4): 461-71.

Murphy and Williams, Consultants. 1978. *Socioeconomic Impact Assessment: A Methodology Applied to Synthetic Fuels*. Washington, D.C.: U.S. Dept. of Energy.

Murray, James A., and Weber, Bruce A. 1982. "The Impacts of Rapid Growth on the Provision and Financing of Local Public Services." In *Coping with Rapid Growth in Rural Communities*, ed. Bruce A. Weber and Robert E. Howell, pp. 97-113. Boulder, Colo.: Westview Press.

Myhra, David. 1975a. "Boomtown Planning: Examples of Successful Applications at Nuclear Power Plant and Western Coal Mining Sites." Paper presented at the 57th Annual Conference, *Planning 75: Innovation and Action*. San Antonio: American Institute of Planners.

Myhra, David. 1975b. "Colstrip, Montana . . . The Modern Company Town." Coal Age May.

Myhra, David. 1980. *Energy Plant Sites: Community Planning for Large Projects*. Atlanta: Conway Publications.

Nathanson, Josef. 1980. *Early Warning Information Systems for Business Retention*. Urban Consortium Information Bulletin. Washington, D.C.: U.S. Dept. of Commerce, Economic Development Administration.

Neil, C. C. 1982. "Development of Single Enterprise Resource Towns in Northern Australia." Paper presented at Conference of Association Universitaire Canadienne d'Etudes Nordique, at Montreal, Quebec.

Newhouse, Joseph P.; Williams, Albert P.; Bennett, Bruce W.; and Schwartz, William B. 1982. "Where Have All the Doctors Gone?" *Journal of the American Medical Association* 247:2392-96.

Newton, P. W. 1982. "Rapid Growth from Energy Projects: Assessing Population and Housing Impacts in the Gippsland Energy Resources Region, Victoria." *The Building Economist* 21(3): 99-107.

Nickens, J. C. 1983. "Impact Fee Legislation: Origins and Effect in Florida." *Economic Development Review* 1(1): 16-20.

North Dakota. 1981. North Dakota Facility Siting Act. Bismarck.

Northern Flood Agreement. 1977. Agreement among the Province of Manitoba, Manitoba-Hydro, the Northern Flood Committee, and the Canadian Government, Manitoba.

Northern States Power. 1982. Stipulation Agreement for Proposed Sherco 3 Generating Unit. Minneapolis.

Nothdurft, William E. 1983. *Renewing America: Natural Resource Investment and State Economic Development*. Washington, D.C.: Council of State Planning Agencies.

O'Connor, Patrick. 1983. Telephone interview by John M. Halstead. Community Development Coordinator. Knoxville: Tennessee Valley Authority.

OECD. 1979. *Analysis of the Environmental Consequences of Significant Public and Private Projects*. Paris, France: Organization for Economic Cooperation and Development.

O'Hare, Michael. 1977. "Not On My Block, You Don't--Facility Siting and the Strategic Importance of Compensation." *Public Policy* 25(7): 407-58.

O'Hare, Michael; Bacow, Lawrence; and Sanderson, Debra. 1983. *Facility Siting and Public Opposition*. New York: Von Nostrand Reinhold.

OIA. 1982. "OIA Participates in Impact Funding." *Overthrust News*. Iss. No. 3:4-5. Denver: Overthrust Industrial Association.

Olien, Roger M., and Olien, Diana Davids. 1982. *Oil Booms: Social Change in Five Texas Towns*. Lincoln: Univ. of Nebraska Press.

Olson, Dean F. 1981. "The Alaska Renewable Resources Corporation." In *Expanding the Opportunity to Produce: Revitalizing the American Economy Through New Enterprise Development*, ed. Robert Friedman and William Schweke. Washington, D.C.: Corporation for Enterprise Development.

ONWI-87. 1980. *Consultation and Concurrence Workshop Proceedings.* Office of Nuclear Waste Isolation. Columbus, Ohio: Battelle Memorial Inst.

Owens, Nancy J. 1983. "Is a Legal Basis for Impact Mitigation Necessary?" In *Proceedings of the Alaska Symposium on the Social, Economic, and Cultural Impacts of Natural Resource Development.* Fairbanks: Univ. of Alaska.

Paget, G., and Rabnett, R. A. 1981. "Planning for Large-Scale Energy Resource Developments." Paper presented at The Human Side of Energy Second International Forum, 16-19 August, at Edmonton, Alberta.

Parkinson, A.; Montgomery, S. W.; and Humphreys, R. D. 1980. *A Study of the Impact of Construction Camps on the People of Northeast Alberta.* Edmonton: Alberta Environment.

Parsons, Talcott. 1968. *The Structure of Social Action.* New York: Free Press.

Payne, Barbara A. 1982. "Patterns of Change in the Business Community in Energy Boomtowns." In *Proceedings of the Fifth Conference on the Small City and Regional Community.* Stevens Point: Univ. of Wisconsin-Stevens Point.

Pearson, Curtis. 1983. Telephone interview by John M. Halstead. Basin Electric Power Cooperative, Bismarck, N. Dak.

Pearson, Curtis. 1984. *ITAT Construction Work Force Report.* Bismarck, N. Dak.: Inter-Industry Technical Assistance Team (Basin Electric Power Coop.).

Peelle, Elizabeth. 1979. "Mitigating Community Impacts of Energy Development." Paper presented at the Annual Meeting of the American Association for the Advancement of Science, 3 January, at Houston, Tex.

Petak, William J. 1980. "Environmental Planning and Management." *Environmental Management* 4(4): 287-95.

Peters, Ted F. 1983. "Ethical Considerations Surrounding Nuclear Waste Repository Siting and Mitigation." In *Nuclear Waste: Socioeconomic Dimensions of Long-Term Storage*, ed. Steve H. Murdock, F. Larry Leistritz, and Rita R. Hamm. Boulder, Colo.: Westview Press.

Petro-Canada, Inc. 1982. *Registered Trapper's Compensation Program, Monkman Coal Project.* Calgary, Alberta.

Pietens, Brad. 1979. "Some Facts of Life About Boomtown Educations." In *Boomtowns and Human Services*, ed. J. A. Davenport and J. Davenport. Laramie: Univ. of Wyoming School of Social Work.

Pijawka, D., and Chalmers, James A. 1983. "Impacts of Nuclear Generating Plants on Local Areas." *Economic Geography* 59(1): 66-80.

Pinfield, Lawrence T., and Etherington, Lois D. 1982. *Housing Strategies of Resource Firms in Western Canada.* Burnaby, British Columbia: Simon Fraser Univ., Dept. of Business Administration.

Planning Center. 1982. *Louisiana Impacts of Declining OCS Petroleum Production: A Scoping Study.* Report prepared for the Louisiana Geological Survey, Dept. of Natural Resources. New Orleans.

Popper, Karl R. 1959. *The Logic of Scientific Discovery.* New York: Harper and Row.

President's Economic Adjustment Committee. 1981. *Community Impact Assistance Study.* Washington, D.C.: Intergovernmental/Interagency Task Force on Community Assistance.

Proctor and Redfern Group and Ontario Hydro. 1979. *A Social and Community Impact Monitoring and Review System.* Rpt. No. 79017. Toronto: Ontario Hydro Route Selection Division.

Pulver, Glen C. 1983. "Elements of a Comprehensive Community Economic Development Strategy." Paper presented at the Community Economic Development Strategies Conference, 1-3 March, at Omaha, Nebr.

Purdy, B. J.; Peelle, Elizabeth; Bronfman, B. H.; and Bjornstad, D. J. 1977. *A Post Licensing Study of Community Effects of Two Operating Nuclear Power Plants.* Oak Ridge, Tenn.: Oak Ridge National Laboratory.

Quality Development Associates, Inc. 1978. *Oil Shale Development: A Description of the Socioeconomic Mitigation Strategies at the Community and County Level.* Denver: Quality Development Associates, Inc.

Quinn, Sean. 1979. "The Impact of Lumber Mill Closure." *Northern California Review of Business and Economics*, pages 4-10.

Rabnett, R. A. and Associates. 1978. *Problems and Responses: Resource Community Development.* Victoria, British Columbia: Dept. of Municipal Affairs.

Rafferty, Timothy. 1981. Personal communication with F. Larry Leistritz. Spokane: Washington Water Power Co.

Rapp, Donald A. 1980. *Uranium Mining and Milling Work Force Characteristics in the Western United States.* LA-8656-MS. Los Alamos, N. Mex.: Los Alamos Scientific Laboratory.

Rathge, Richard W.; Leistritz, F. Larry; and Smutco, L. Steven. 1982. "Demographic Changes Associated With Energy Development Projects." Paper presented at Population Association of America Annual Meetings, 29-30 April, at San Diego.

Redburn, F. Stevens, and Buss, Terry F. 1979. "Public Policies for Communities in Economic Crisis: An Overview of the Issues." *Policy Studies Journal* 8(Fall): 143-50.

Reeder, Richard J. 1984. *Nonmetropolitan Fiscal Indicators: A Review of the Literature.* ERS Staff Rpt. No. AGEC 830908, Economic Development Division, ERS. Washington, D.C.: USDA.

Reese, M. H., and Cummings, J. C. 1979. "Energy Impacted Housing." In *Boomtowns and Human Services,* ed. J. A. Davenport and J. Davenport. Laramie: Univ. of Wyoming, School of Social Work.

Riley, R. W., and Hess, P. R. 1981. Letter to President Ronald Reagan. August 1. Washington, D.C.: State Planning Council on Radioactive Waste Management.

Rio Blanco County, Colo. 1979. County ordinances. Meeker, Colo.

Roberts, Richard; Kupfer, George; Walkey-Zaitzeff, Anna; and Morellato, Maria. 1980. *Development of Socio-Economic Principles and Practices.* Vancouver, British Columbia: Cornerstone Planning Group Ltd.

Robinson, Ira M. 1962. *New Industrial Towns on Canada's Resource Frontier.* Dept. of Geography Res. Paper No. 73. Chicago: Univ. of Chicago.

Robinson, Ira M. 1982. "New Resource Towns on Canada's Frontier." Paper presented at the Four Nations Energy Resource Communities Conference, 23-30 June, at Calgary and Edmonton, Alberta.

ROMCOE. 1982. *Rapid Growth Communities Project: Financing, Experiences, and Advise.* Boulder, Colo.: Rocky Mountain Center on Environment, Center for Environmental Problem Solving, July.

Root, Kenneth A. 1979. *Perspectives for Communities and Organizations on Plant Closings and Job Dislocations.* Ames, Iowa: North Central Regional Center for Rural Development.

Root, Kenneth A. 1982. "Phasing and Timing of Projects: Decommissioning and Shutdown Issues." Paper presented at the Energy Resource Communities Conference, 23-30 June, at Calgary/Edmonton, Alberta.

RSBC. 1979. Environment and Land Use Act. Victoria, British Columbia.

Sanderson, D. R. 1979. *Compensation in Facility Siting Conflicts.* Doc. No. 11. Cambridge: MIT Energy Impacts Project.

Santini, Danilo J.; South, David W.; and Stenehjem, Erik J. 1979. *Evidence of Future Increases in the Impact of Conventional Electric Facilities on Rural Communities.* ANL/EES-TM-152. Argonne, Ill.: Argonne National Laboratory.

Santini, Danilo J.; Stenehjem, Erik J.; and Meguire, Philip. 1978. *Methods of Eliminating Potential Socioeconomic Constraints on Near-Term Coal-Energy Development.* ANL/EES-TM-47. Argonne, Ill.: Argonne National Laboratory.

Sattalthite, William. 1983. Telephone interview by John M. Halstead. Public relations spokesperson. Cyprus Creek/Amoco, Challis, Idaho.

Schaeffer, John. 1983. "Social and Cultural Impact Issues." In *Proceedings of the Alaska Symposium on the Social, Economic, and Cultural Impacts of Natural Resource Development.* Fairbanks: Univ. of Alaska.

Schmickle, Sharon. 1983. "Riding the Boom: For 87 Iron Rangers, Working Means A 1,000-Mile Bus Ride." *Minneapolis Tribune,* October 2.

Schmidt, J. F.; Oehrtman, R. L.; and Doekson, G. A. 1978. "Planning Ambulance Service for a Rural Emergency Medical District." *Southern Journal of Agricultural Economics* July:127-133.

Schumpeter, Joseph. 1942. *Capitalism, Socialism, and Democracy.* New York: Harper and Row.

Schwarzweller, H. K. 1979. "Migration and the Changing Rural Scene." *Rural Sociology* 44(1): 7-23.

Schweke, William, and Friedman, Robert. 1983. "The Debate Over 'Who Generates Jobs'?" *The Entrepreneurial Economy* 1(8): 2-4.

Schweke, William, and Jones, Meriwether. 1982. *Economic Adjustment Resources*. Washington, D.C.: The Corporation for Enterprise Development.

Selvik, Arne; Summers, Gene F.; and Mackay, A. G. 1982. "External Linkages: Economic and Political Dependency of Energy Resource Communities." Paper presented at the Four Nations Energy Resource Communities Conference, 23-30 June, at Calgary and Edmonton, Alberta.

Serie, P. J.; Dressen, A. L.; and Aly, K. C. 1983. "Low-Level Waste Siting." In *Proceedings of Waste Management '83 Conference*, ed. Roy Post. Tucson, Ariz.

Sewel, J. 1983. *Social Consequences of Oil Developments*. Edinburgh: Scottish Development Dept.

Shaffer, Ron E. 1983. "Capital Markets and Community Economic Development." Typescript. Madison: Univ. of Wisconsin, Dept. of Agr. Econ.

Shapira, Philip. 1983. "Shutdowns and Job Loss in California." Typescript. Berkeley and Oakland: Univ. of California and Plant Closures Project, Dept. of City and Regional Planning.

Shen, Randolph F. C. 1980. "Estimating the Economic Impact of the 1973 Navy Base Closing." *Naval Research Logistics Quarterly* (No. 2): 335-44.

Shields, M. A.; Cowan, J. T.; and Bjornstad, D. J. 1979. *Socioeconomic Impacts of Nuclear Power Plants: A Paired Comparison of Operating Facilities*. Oak Ridge, Tenn.: Oak Ridge National Laboratory.

Shurcliff, Alice W. 1977. "The Local Impact of Nuclear Power." *Technology Review* (January): 40-47.

Siefried, Inga. 1983. Telephone interview by John M. Halstead. Alberta Environment. Edmonton, Alberta.

Sigurdson, Glenn. 1983. Telephone interview by John M. Halstead. Counsel for Northern Flood Agreement. Taylor, Brazzell, McCaffrey. Winnipeg, Manitoba.

Simmel, Georg. 1956. *Conflict and the Web of Group Affiliation*. Trans. Kurt H. Wolff. Glencoe, Ill.: Free Press.

Squire, Catherine A. 1982. "Options for Plant Retention in the Wake of an Anticipated Closure." *The Entrepreneurial Economy* 1(5): 9-10.

Staniforth, Sydney D., and Haggard, Joel P. 1982. "The Availability of Money in Rural Communities." *Economic Issues*. Iss. No. 70. Madison: Univ. of Wisconsin, Dept. of Agr. Econ.

Stinchcombe, Arthur L. 1968. *Constructing Social Theories*. New York: Harcourt, Brace, and World.

Stinson, Thomas F. 1978. *State Taxation of Mineral Deposits and Production*. Rural Development Res. Rpt. No. 2, Economic Development Div. Washington, D.C.: USDA.

Stinson, Thomas F. 1981. "Overcoming Impacts of Growth on Local Government Finance." *Rural Development Perspectives*. RDP-4. Washington, D.C.: USDA, ERS, September.

Stinson, Thomas F., and Temple, George S. 1983. *State Mineral Taxes, 1982*. Rural Development Res. Rpt. No. 36. USDA, ERS. Washington, D.C.: GPO.

Stinson, Thomas F., and Voelker, Stanley W. 1978. *Coal Development in the Northern Great Plains: The Impact on Revenues of State and Local Governments*. Economics, Statistics, and Cooperatives Service of USDA. Agr. Econ. Rpt. No. 394. Washington, D.C.: GPO.

Stinson, Thomas F., and Voelker, Stanley W. 1982. *Energy Development: Initial Effects on Government Revenues*. WRDC Pub. No. 15. Corvallis, Oreg.: Western Rural Development Center.

Storey, Keith. 1982. "Impacts and Implications of Regional Labour Preference Policies." Paper presented at the Second International Conference on Oil and the Environment, 16-19 August, at Halifax, Nova Scotia.

Stuart/Nichols Associates. 1979. *The Fiscal Impacts of Energy Development on Wyoming's Local Governments*. Denver.

Summers, Gene F.; Evans, S. D.; Clemente, F.; Beck, E. M.; and Minkoff, J. 1976. *Industrial Invasion of Rural America*. New York: Praeger Publishers.

Summers, Gene F., and Selvik, Arne, eds. 1979. *Nonmetropolitan Industrial Growth and Community Change*. Cambridge, Mass.: Lexington Books.

Susskind, Lawrence. 1980. *Citizen Participation in the Siting of Hazardous Waste Facilities*. Draft. Prepared for the National Governors' Assoc.

Susskind, Lawrence, and O'Hare, M. 1977. *Managing the Social and Economic Impacts of Energy Development.* Cambridge: MIT, Laboratory of Arch. and Planning.

Sweet, Morris L. 1981. *Industrial Location Policy for Economic Revitalization.* New York: Praeger Publishers.

Swerdloff, Sol. 1980. *A Guide for Communities Facing Major Layoffs or Plant Shutdowns.* Employment and Training Administration, U.S. Dept. of Labor. Washington, D.C.: GPO.

Symon, Mary Louise. 1980. Former member, State Planning Council. Letter to Governor Richard Riley, May 5.

Symon, Mary Louise. 1982. Personal interview by John M. Halstead. Former member, State Planning Council. Madison, Wis.

Teague, Carroll. 1982. "Private Sector Responsibility in a Plant Shutdown." *The Entrepreneurial Economy* 1(5): 6.

Tester, F. J., and Mykes, W., eds. 1981. *Social Impact Assessment: Theory, Method, and Practice.* Calgary, Alberta: Detselig Enterprises.

Thompson, Charles. 1983. Telephone interview by John M. Halstead. North Dakota Public Service Commission. Bismarck, N. Dak.

Thurow, Lester. 1980. *The Zero-Sum Society: Distribution and the Possibilities for Economic Change.* New York: Basic Books.

Time. 1984. "Pulling the Nuclear Plug." 123:34-38.

TOSCO Foundation. 1980. *Socioeconomic Impact Mitigation Program, NOSR-1.* Boulder, Colo.

Turner, Jonathan H. 1974. *The Structure of Sociological Theory.* Homewood, Ill.: Dorsey Press.

TVA. 1982. *Economic Revitalization Program, Phipps Bend, Yellow Creek and Hartsville.* Draft. Knoxville.

Tweeten, L., and Brinkman, G. L. 1976. *Micropolitan Development.* Ames: Iowa State Univ. Press.

Uhlman, J. M., and Olson, J. K. 1984. *Planning for Rural Human Services.* Denver: Office of Human Development Services, Dept. of Health and Human Services.

U.S. Bureau of the Census. 1982. *State Government Tax Collections in 1981.* Washington, D.C.: GPO.

U.S. Bureau of the Census. 1983. *Statistical Abstract of the United States, 1982-1983.* Washington, D.C.: GPO.

U.S. Department of Energy. 1980. *Management of Commercially Generated Radioactive Waste.* DOE/EIS-0046F. Washington, D.C.

U.S. Department of Energy. 1981. *Solvent Refined Coal-I Demonstration Project, Final Environmental Impact Statement.* DOE/EIS-0073. Washington, D.C.

U.S. Department of Housing and Urban Development. 1976. *Rapid Growth from Energy Projects: Ideas for State and Local Action.* Washington, D.C.: GPO.

U.S. Department of the Interior. 1982. *Proposed Outer Continental Shelf Oil and Gas Lease Sale, St. George Basin, Final Environmental Impact Statement.* Washington, D.C.: Minerals Management Service.

U.S. Department of the Interior, National Park Service. 1983. *Energy Impacted Communities: Challenges in Recreation, Open Space, and Historic Preservation.* Denver, Colo: National Park Service Regional Office.

U.S. Energy Research and Development Administration. 1976. *Managing the Social and Economic Impacts of Energy Developments.* Washington, D.C.: Centaur Management Consultants, Inc.

U.S. Environmental Protection Agency. 1980. *Using Compensation and Incentives When Siting Hazardous Waste Management Facilities.* Washington, D.C.

U.S. General Accounting Office. 1982. *Government-Industry Cooperation Can Enhance the Venture Capital Process.* Report to Senator Lloyd Bentsen, Joint Economic Committee. Washington, D.C.

U.S. Senate. 1980. *The Role of the Federal Government in Employee Ownership of Business.* Select Committee on Small Business. Washington, D.C.: GPO.

U.S. Small Business Administration. 1983. *The State of Small Business: A Report of the President.* Washington, D.C.: GPO.

Urban Systems Research and Engineering, Inc. 1980. *A Handbook for the States on the Use of Compensation and Incentives in the Siting of Hazardous Waste Management Facilities.* Prepared for U.S. Environmental Protection Agency. Cambridge, Mass.: Urban Systems Research and Engineering Inc.

Vatne, Eirik. 1980. "Structural Change, Industrial Linkages and Production Systems: The Case of a One-Company Town." Paper presented at the IGU Commission on Industrial Systems meeting, 25-31 August, at Tokyo, Japan.

Vatne, Eirik. 1981. "Single Sector Economies: The Resource Base Trap." Paper presented at the Sixth International Seminar on Marginal Regions, August, at Bergen and Sogndal, Norway.

Vaughan, Roger. 1980. *Local Business and Employment Retention Strategies.* Urban Consortium Bul. Washington, D.C.: U.S. Dept. of Commerce, Economic Development Administration.

Vincent, Nicholas. 1981. "Field Actualities of an Impact Monitoring Program." In *Social Impact Assessment: Theory, Method, and Practice*, ed. F. J. Tester and W. Mykes, pp. 254-268. Calgary, Alberta: Detselig Enterprises.

Voelker, Stanley W. 1981. *State and Local Taxes Affected by Energy Developments in Selected Western States.* Washington, D.C: U.S. EPA, Office of Research and Development.

Walsh, Pat. 1982. Personal interview by John M. Halstead. Former assistant attorney general, Wisconsin. Madison.

Wandesforde-Smith, Geoffrey. 1979. *Varieties of Environmental Impact Assessment: An International Analysis.* Netherlands: Mileiu en Recht.

Warrack, Allan A., and Dale, Lynne. 1981. "Megaprojects and Small Communities--Is It Progress?" Paper presented at The Human Side of Energy, Second International Forum, 16-19 August, at Edmonton, Alberta.

Watson, K. S. 1977. "Measuring and Mitigating Socioeconomic Environmental Impacts of Constructing Energy Projects." *Natural Resources Lawyer* 10:393-403.

Weber, Bruce A., and Howell, Robert E., eds. 1982. *Coping with Rapid Growth in Rural Communities.* Boulder, Colo.: Westview Press.

Weisz, R. 1979. "Stress and Mental Health in a Boom Town." In *Boomtowns and Human Services*, ed. J. A. Davenport and J. Davenport. Laramie: Univ. of Wyoming, School of Social Work.

Wernette, Dee R. 1980. "Estimation and Mitigation of Socioeconomic Impacts of Western Oil Shale Development." Paper presented at Seventh Annual Conference on Energy and the Environment, DOE and EPA, 30 November-3 December, at Phoenix, Ariz.

West, Stanley W. 1977. *Opportunities for Company-Community Cooperation in Mitigating Energy Facility Impacts.* Cambridge: MIT, Laboratory of Arch. and Planning.

Western Fuels, Inc. 1981. *Socioeconomic Impact Mitigation Agreement for the Deserado Mine, Bonanza Station and Associated Facilities.* Washington, D.C.

Western Research Corporation and Basin Electric Power Cooperative. 1983. *Socioeconomic Impact Monitoring Report: Final Summary.* Wheatland, Wyo.: Missouri Basin Power Project.

Wieland, James S., and Leistritz, F. Larry. 1978. *Profile of the Coal Creek Project Construction Work Force.* Agr. Econ. Misc. Rpt. No. 33. Fargo: N. Dak. Agr. Exp. Sta.

Wieland, James S.; Leistritz, F. Larry; and Murdock, Steve H. 1977. *Characteristics and Settlement Patterns of Energy-Related Operational Workers in the Northern Great Plains.* Agr. Econ. Rpt. No. 123. Fargo: North Dakota Agr. Exp. Sta.

Wieland, James S.; Leistritz, F. Larry; and Murdock, Steve H. 1979. "Characteristics and Residential Patterns of Energy-Related Work Forces in the Northern Great Plains." *Western Journal of Agricultural Economics* 4:57-68.

Wilkinson, K. P.; Thompson, J. G.; Reynolds, R. R.; and Ostresh, L. M. 1982. "Local Social Disruption and Western Energy Development." *Pacific Sociological Review* 25(3): 275-96.

Williams, Gary. 1982. *BLM Social Effects Project Community Report: Wheatland, Wyoming.* Billings, Mont.: Mountain West Research-North, Inc. in association with Western Research Corporation.

Wisconsin. 1981. Assembly Bill 555, Chapter 62, Laws of 1981.

Wolf, C. P. 1981. "Social Impact Assessment." *IAIA Bulletin* 1(1): 9-19.

Wolf, C. P. 1983. "Social Impact Assessment: A Methodological Overview." In *Social Impact Assessment Methods*, ed. Kurt Finsterbusch, Lynn G. Llewellyn, and C. P. Wolf, pp. 15-33. Beverly Hills: Sage Publications.

Wyoming. 1981. *Wyoming Industrial Development Information and Siting Act.* Cheyenne.

Young, Gordon M. 1981. "The Computer Model as a Municipal Management Tool." In *Computer Models and Forecasting Socio-Economic Impacts of Growth and Development.* Edmonton: Univ. of Alberta.

Zetterburg, Hans. 1965. *On Theory and Verification in Sociology.* 3d ed. Totowa, N.J.: Bedminster Press.

BLM Library
D-553A, Building 50
Denver Federal Center
P. O. Box 25047
Denver, CO 80225-0047

BLM Library
D-553A, Building 50
Denver Federal Center
P. O. Box 25047
Denver, CO 80225-0047